2122 CARLISLE BLVD ALBUQUERQUE, NEW MEXICO

PROJECT DATA

SCOPE OF WORK:

THIS PROJECT IS THE CONSTRUCTION OF A 750 SF

PRE-FABRICATED DRIVE-THRU ONLY COFFEE SHOP

PROJECT ADDRESS: 2122 CARLISLE BLVD

ALBUQUERQUE, NEW MEXICO

ZONING: COMMERCIAL

GROSS FLOOR AREA: 750 SQ.FT.

CONSTRUCTION TYPE: V-B

OCCUPANCY: **GROUP B - BUSINESS**

APPLICABLE CODES:

2021 NEW MEXICO COMMERCIAL BUILDING CODE 2021 NEW MEXICO MECHANICAL CODE 2021 NEW MEXICO PLUMBING CODE 2020 NEW MEXICO ELECTRICAL CODE 2021 INTERNATIONAL FIRE CODE 2021 INTERNATIONAL FUEL GAS CODE 2021 NEW MEXICO COMMERCIAL ENERGY

CONSERVATION CODE

2021 THE CITY ORDINANCE REFERENCES ADOPTION OF THE TECHNICAL CODES AND APPENDICES

VICINITY MAP



PROJECT DIRECTORY

<u>OWNER</u>

7BREW EL PASO, LLC - 7 BREW COFFEE GALLOWAY & CO. **CONNOR JOHNSON** CONNOR@7BREWKS.COM 316.806.0288 WICHITA, KS

BUILDING MANUFACTURER

MODUALL, LLC **BRIAN TRUSKETT** BRIANT@MODUALL.COM 4852 S. BROADWAY WICHITA, KS 67216 316.670.7064

3RD PARTY INSPECTOR

ICC, NTA 305 N. OAKLAND AVE. PO BOX 590 NAPPANEE, IN 46550 574.773.7975

ARCHITECT

KRISTOFFER K. STRAIN, AIA 5500 GREENWOOD PLAZA BLVD., SUITE 200 GREENWOOD VILLAGE, CO 80111 CONTACT: KURTIS McMURRAY 316.368.5443

P4.0

P4.1

MEP ENGINEER

GALLOWAY & CO. ALICIA THORPE, P.E. 5500 GREENWOOD PLAZA BLVD. SUITE 200 GREENWOOD VILLAGE, CO 80111 303.770.8884

STRUCTURAL ENGINEER

MIDWEST PREFAB JAKE@MWDW.COM 903.288.7319



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S2.0	PLAN VIEWS
S2.1	ROOF FRAMING PLAN & SECTIONS
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PLUMBING CRAWL SPACE PLAN (SITE ADAPT)

PLUMBING SITE PLAN (SITE ADAPT)

PLUMBING SPECIFICATIONS



PREFABRICATED BUILDING:

THIS BUILDING IS BEING FABRICATED IN A CONTROLLED ENVIRONMENT AND TRANSFERRED TO THE JOB SITE. A NEW MEXICO CERTIFIED 3rd PARTY INSPECTION GROUP HAS BEEN ENGAGED TO CONDUCT THE INSPECTION OF ALL FABRICATION WITHIN THE 7 BREW COFFEE WAREHOUSE. THE INSPECTION WILL INCLUDE STRUCTURAL, FRAMING, BUILDING, MECHANICAL, PLUMBING AND ELECTRICAL. REFERENCE BUILD AND INSTALL MANUAL FOR REPORT AND CONSTRUCTION METHODS AND PROCEDURES.

GENERAL CONSTRUCTION PROCEDURES:

- 1. ALL CONSTRUCTION SHALL BE EXECUTED IN STRICT COMPLIANCE WITH ALL LOCAL CODES AND ORDINANCES. GENERAL CONTRACTOR SHALL COMPLY WITH ALL CONSTRUCTION REGULATIONS AND PROCEDURES ESTABLISHED BY THE LANDLORD.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING APPLICATION FOR AND PROCURING ALL PERMITS AND CERTIFICATES AS MIGHT BE REQUIRED BY GOVERNING AGENCIES AND SHALL BEAR THE COST FOR SUCH PERMITS AND CERTIFICATES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS OF THE SITE.
- EVERY EFFORT HAS BEEN MADE TO ASSURE ACCURATE CONSTRUCTION DOCUMENTS, IF A CONFLICT EXISTS THE GENERAL CONTRACTOR SHALL CONTACT THE ARCHITECT IMMEDIATELY FOR CLARIFICATION. THESE DOCUMENTS INDICATE THE DESIGN INTENT.
- 4. THE GENERAL CONTRACTOR SHALL MAINTAIN DIRECT SUPERVISION OVER ALL SUBCONTRACTORS AND SHARE RESPONSIBILITY FOR THEIR PERFORMANCE AND QUALITY OF WORK. A LIST OF ALL SUBCONTRACTORS SHALL BE PROVIDED TO THE OWNER AND THE ARCHITECT. A COPY OF THIS LIST SHALL BE POSTED ON THE JOB SITE.
- ALL SIGNAGE AND MOUNTING DEVICES SHALL BE PROVIDED, AND ALL SIGNAGE APPROVALS OBTAINED, BY OWNERS SIGN CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE ELECTRICAL POWER AS REQUIRED AND INSURE SUFFICIENT SPACE AND CLEARANCE IS PROVIDED FOR PROPER INSTALLATION. SIGNAGE CONTRACTOR SHALL APPLY FOR AND SECURE ALL APPROVALS REQUIRED BY ALL LOCAL GOVERNING AGENCIES AND SUPPLY ANY DRAWINGS OR GRAPHIC REPRESENTATIONS REQUIRED BY LANDLORD.
- ALL CONCEALED WOOD BLOCKING USED IN CONSTRUCTION SHALL BE FIRE-RETARDANT TREATED (IF APPLICABLE).
- GENERAL CONTRACTOR SHALL PERFORM AND/OR CAUSE TO BE PERFORMED ALL WORK IN A FIRST-CLASS WORKMANLIKE MANNER AND IN ACCORDANCE WITH EACH TRADE'S ESTABLISHED PROCEDURES AND MANUFACTURER'S RECOMMENDATIONS FOR PRODUCT USE AND INSTALLATION.
- ALL PRODUCTS USED ON THIS PROJECT SHALL BE FIRST QUALITY, NEW AND FREE OF ASBESTOS OR OTHER ENVIRONMENTALLY UNSAFE SUBSTANCES.
- 9. MILLWORK, BASE, DESIGNATED TRIM, ETC. SHALL BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR WHERE INDICATED ON THE DRAWINGS AND/OR SCHEDULES.
- 10. GENERAL CONTRACTOR SHALL PROVIDE ALUMINUM CORNER GUARDS AT ALL EXPOSED OUTSIDE CORNERS. ALUMINUM GUARDS TO BE 8'-0" LENGTHS AS MANUFACTURED BY INSTITUTIONAL PRODUCTS CORPORATION.

UNO VAR

WPT

WR

WTW

11. GENERAL CONTRACTOR SHALL CONTACT ARCHITECT PRIOR TO CONSTRUCTION START DATE TO CONFIRM THAT HE/SHE HAS LATEST APPROVED CONSTRUCTION DOCUMENTS FOR THIS LOCATION.

panic hardware

ABBREVIATIONS

A/C	air conditioning	Е	east	ID
ABV	above	EA	each	INT
AFF	above finished floor	EL, ELEV	elevation	JT
ALT	alternate	ELECT	electric(al)	KO
APPROX	approximately	ELEV	elevation	LAV
ARCH	architect(ural)	EQ	equal	LBL
AUTO	automatic	EST	estimate	LH
BD	board	EW	each way	LL
BEL	below	(E)	existing	LPT
BLDG	building	ÈJ	expansion joint	LT
ВО	bottom of	EXT	exterior	LVR
BSMT	basement	FA	fire alarm	LW
BVL	bevel	FBO	furnished by other	LWC
CAB	cabinet	FD	floor drain	М
CCTV	closet circuit television	FE	fire extinguisher	MAX
CG	corner guard	FEC	fire extinguisher cabinet	MBF
CJ	control joint	FF	finished floor	MEC
CL	centerline	FFE	finished floor elevation	MEP
CLG	ceiling	FFL	finished floor line	MFR
CLR	clear	FND	foundation	MHC
CMU	concrete masonry unit	FOC	face of concrete	MIN
CNR	corner	FOF	face of finish	MIS
CO	cleanout	FOS	face of stud	MM
COL	column	FTG	footing	MRE
COMP	compress(ed)(ion)(ible)	FUR	furr(ed)	MTL
CONC	concrete	GA	gauge, gage	N
CONST	construction	GALV	galvanized	NIC
CONT	continue, continuous	GB	grab bar	NON
D	depth	GC	general contractor	NTS
DBL	double	GYP BD	gypsum board	OA
DEMO	demolish, demolition	HB	hose bibb	OC
DIAG	diagonal	HC	hollow core	OD
DIAM	diameter	HD	heavy duty	OH
DIM	dimension	HDR	header	OH
DIV	division	HT	height	OPP
DL	dead load	HM	hollow metal	ORE
DN	down	HTG	heating	PB
DR	door	HVAC	heating/ventilating/air conditioning	PC
DS	downspout	HW	hardware	PCF
DTL	detail	HWD	hardwood	PER
DWG	drawing	ICF	insulated concrete form(ing)	PER
פאים	diawiilg	101	modiated concrete form(mg)	

inside diameter interior joint knock out lavatory label left hand live load low point light louver lightweight lightweight concrete	PH PK PL PF PF PS PS PS PT R R
meter(s) maximum member mechanical mechanical, electrical, plumbing manufacture(r) magnetic hold open minimum miscellaneous millimeter(s) metal roof deck metal north not in contract nominal not to scale overall on center outside diameter	RE R
opposite hand overhead opposite overflow roof drain panic bar precast concrete	ST SY SY TH TC

per cubic foot

perforate(d)

PK	parking
PLF	pounds per linear f
PNL	panel(ed)(ing)
PREFAB	prefabricate(d)
PRF	preformed
PSC	prestressed concre
PSF	pounds per square
PSI	pounds per square
PT	point
PTC	post-tensioned cor
R	radius
RA	return air
RB	rubber base
RD	roof drain
REF	reference
REV	revision
RH	right hand
RM	room
RO	rough opening
ROW	right of way
S	south
SC	solid core
SEC	section
SF	square feet (foot)
SIM	similar
SP	soundproof
SPEC	specification(s)
SQ	square
SS	stainless steel
STD	standard
STG	seating
STRUCT	structure(al)
SYM	symmetrical
SYS	system
T&G	tongue and groove
THK	thick(ness)
TO	top of

top of steel

top of wall

TOS

tube steel
top of slab
typical
unfinished
unless noted otherwise
varies, variable
vapor barrier
verify in field
west
width, wide
with
without
wood base
water closet
wood
wall hung
waterproof(ing)
working point
water resistant
wall to wall

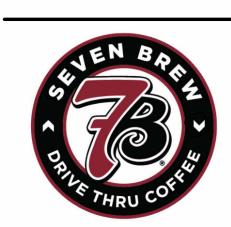
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11-14-2025





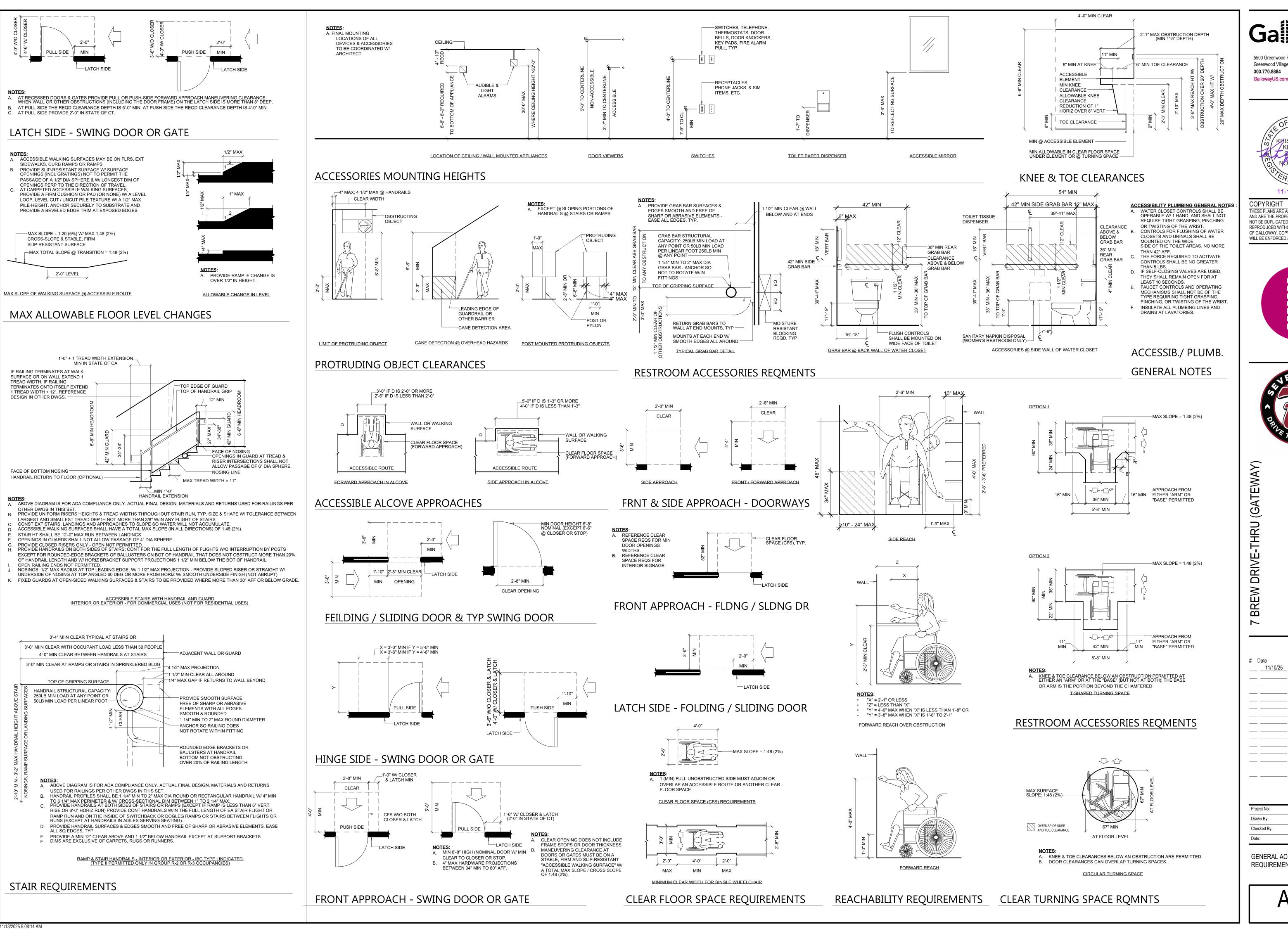
	11/10/25	
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Issue/Description

Project No:	61P000006.30
Orawn By:	VI
Checked By:	KM
Date:	10/24/2025

COVER

11/13/2025 9:08:13 AM



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BLVD E, NEW 2122 CARLISLE BI ALBUQUERQUE, 1

Issue/Description

Checked By:

GENERAL ACCESSIBILITY REQUIREMENTS

EGRESS SYMBOL LEGEND INDICATES ACTUAL EGRESS WIDTH (IN INCHES) INDICATES MIN. REQUIRED EGRESS WIDTH (IN INCHES) -FOR BUILDING EGRESS CALCULATION ONLY xx" xx" EGRESS WIDTH EXIT SYMBOL MOST REMOTE POINT FROM EXIT ———— PATH OF TRAVEL XX'-X" TRAVEL DISTANCE

Note

Number

TOILET PLAN KEYNOTES

PROJECT DATA

THIS PROJECT IS THE CONSTRUCTION OF A DRIVE-THRU SCOPE OF WORK: 2122 CARLISLE BLVD ALBUQUERQUE, NEW MEXICO ADDRESS:

COMMERCIAL ZONING DISTRICT ZONING:

9,000 SQ.FT. ALLOWABLE AREA: 510 SQ.FT. BUILDING AREA: COOLER AREA 240 SQ.FT. TOTAL BUILDING AREA 750 SQ.FT. CONSTRUCTION TYPE: VB

GROUP B BUSINESS OCCUPANCY: BUILDING OCCUPANT LOAD: 510 SF / 100 = 6 PERSONS 1 MEANS OF EGRESS REQUIRED

COOLER OCCUPANT LOAD: 240 SF/ 300 = 1 PERSON 1 MEANS OF EGRESS REQUIRED

HEIGHT: 19' - 9 7/16" ALLOWABLE HEIGHT:

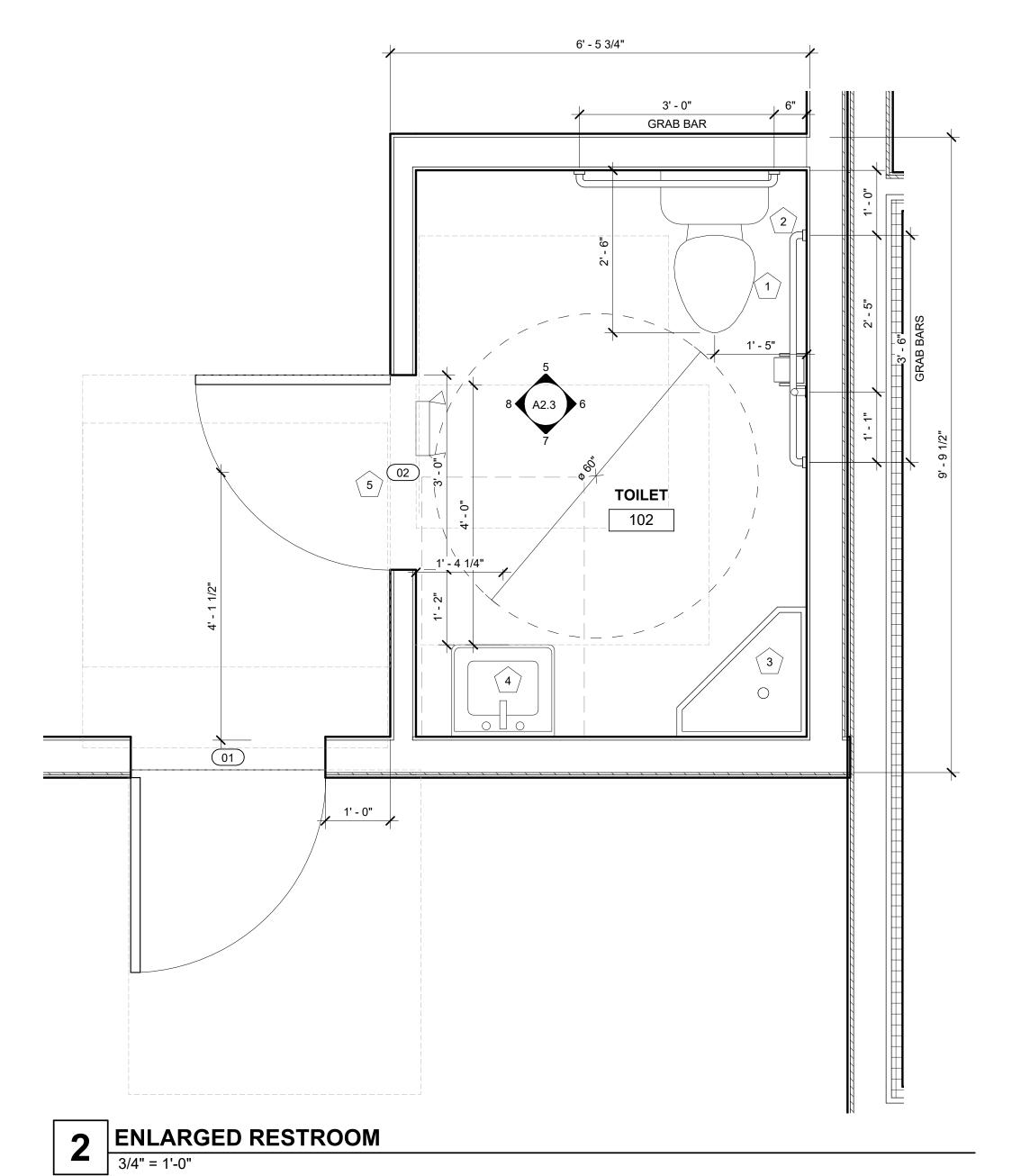
SINGLE STORY WITH STORIES:

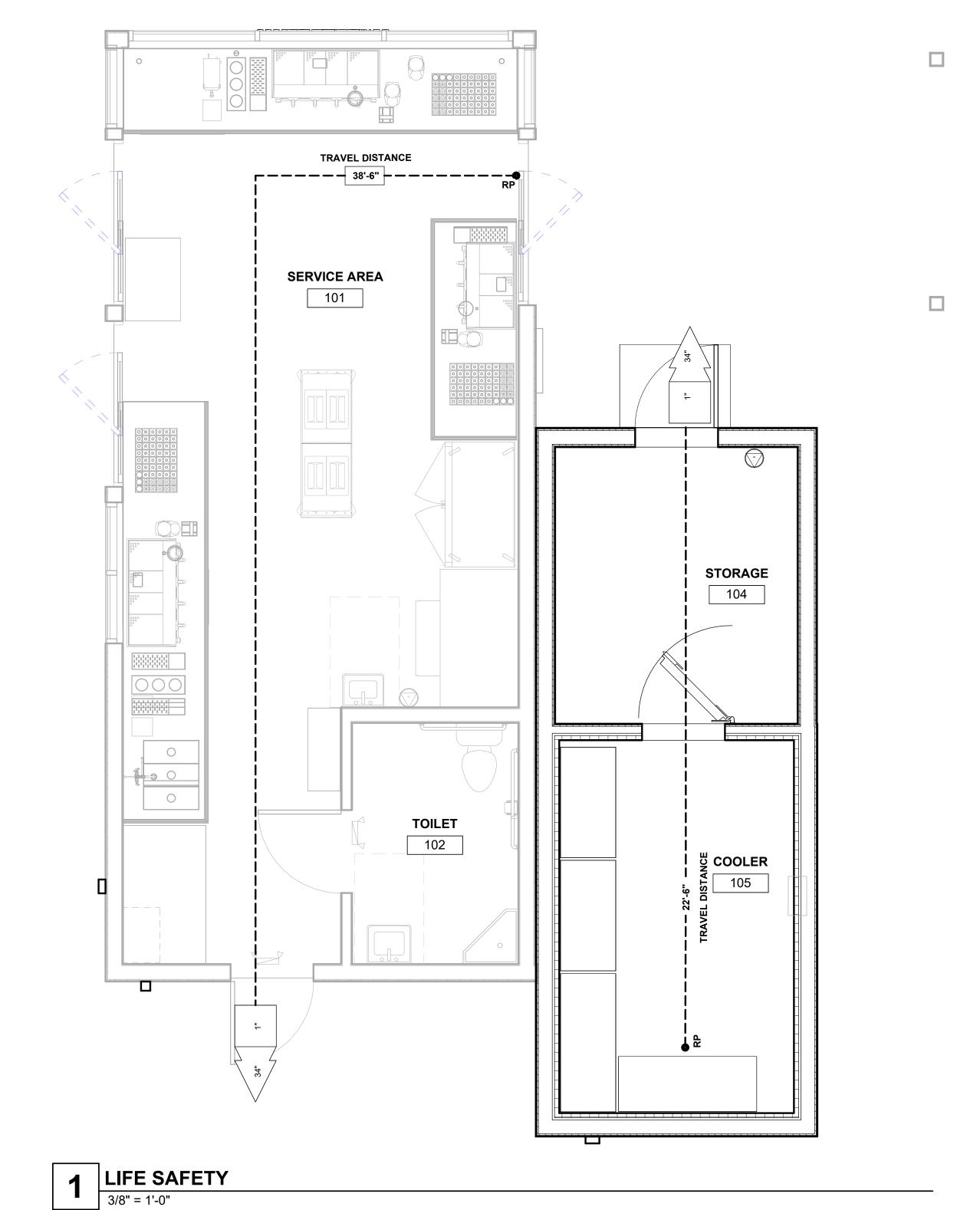
MECHANICAL ACCESS ATTIC CLIMATE ZONE:

NON-SPRINKLERED FIRE PROTECTION:

	FIVELDED AND ODAD DADO OLIALL DE IN COMPLIANCE MITH
1	FIXTURES AND GRAB BARS SHALL BE IN COMPLIANCE WITH A 604 AND 606 - CONTRACTOR SHALL PROVIDE ADDITIONAL
	BLOCKING AS REQUIRED
2	WATER-PROOF MEMBRANE AT TOILET - RETURN MEMBRANE WALL MIN 6"
3	MOP SINK - RE: PLUMBING DRAWINGS
4	30" X 48" CLEAR SPACE AT LAVATORY
5	HM DOOR AND FRAME AT TOILET ROOM - RE: DOOR SCHEDU

Note Text





11/13/2025 9:08:15 AM

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2122 CARLISLE BLVD ALBUQUERQUE, NEW MEXICO

7 BREW DRIVE-THRU (GATE

<u> </u>	Date 11/10/25	Issue/Description
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roject No:	61P000006.30
rawn By:	VI
hecked By:	KM
ate:	05/16/25

LIFE SAFETY PLAN

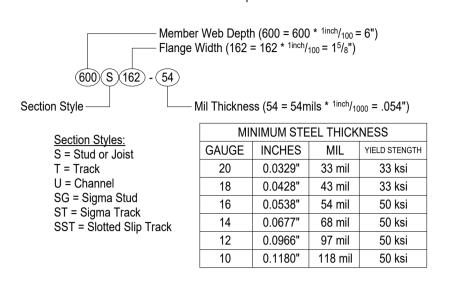
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GENERAL NOTES:

- 1. The latest edition of AISI, SSMA, AISC, and ACI specifications shall govern all phases of fabrication and construction.
- 2. CFS Shop Drawings shall be used in conjuction with the project's Contract Documents and Specifications. The Fabricator shall rectify all discrepancies with the Architect and Engineer or Record prior to fabrication and construction.
- 3. The Fabricator shall verify locations and sizes of all openings and penetrations in framing with mechanical, electrical, and architectural drawings before fabrication and construction.
- 4. The Fabricator shall provide temporary bracing for framing members and panels and web members as required during fabrication and installation. The cold-formed framing systems are not stable and susceptible to damage until all sheathing and permanent bracing is in place.

CFS FRAMING:

- 1. All cold-formed steel framing shall comply with ASTM A1003 and meet the latest requirements of the American Iron and Steel Institute's "Design of Cold-Formed Steel Strucatural Members".
- 2. Member sizes shown within these drawings are the minimum as required by the design. Substitutions with heavier gauges and bigger flange widths are acceptable.
- 3. Typical CFS member identification and nomenclature example:



- 4. All framing components shall be cut squarely for attachment to perpendicular members, or, as required, for an angular fit against abutting members. Members shall be held in place until properly fastened. Splicing of any members is not permitted unless noted otherwise.
- 5. Field applied holes, notching, or coping of framing members is not allowed unless reinforced as per details provided by these drawings. All field cutting of cold-formed steel framing must be achieved by sawing or shearing. Holes created in members with torches is unacceptable.
- 6. Punch-outs shall be at least 8" away from the ends of any member to allow for connections and fasteners.
- 7. Studs, joists, or rafters shall be installed in a manner which will ensure that their ends are positioned against the inside of the track web prior to fastening. Studs, joists, or rafters shall be securely fastened to both flanges of the top and bottom track, unless noted otherwise on the drawings.

CFS CONNECTIONS:

- 1. Fasteners shall be self-drilling, self-tapping galvanized steel screws complying with ASTM C1513. Welding is permitted on 43 mil. or heavier material only. Screws or welds shall be of sufficient size to insure the strength of the connection. All welds of galvanized steel shall be touched up with a zinc-rich paint. Wire tying of components shall not be permitted.
- 2. All welding shall conform to the recommendations of the AWW, AWS, and ANSI specifications, and all welds, including field, shall be made only by certified welders using E6OXX electrodes.
- 3. Minimum effect weld thickness must match or exceed the steel thickness of the thinnest connected part unless noted otherwise.
- 4. Screw fasteners shall maintain a 3/4" minimum clearance from all edges of the steel members. A 3/4" minimum on center spacing must be maintained between adjacent screws.
- 5. Power driven fastener systems, screw anchors, and adhesive anchor system connections are to be used where indicated by these drawings. Fabricator shall comply with all manufacturer recommendations. The following powder actuated fastener criteria is used by this design:

Powder ac	ctuated fastener:	0.157" diame
M	in concrete embed:	1-1/4"
M	in concrete edge distance:	3" U.N.O.
M	in concrete spacing:	4" U.N.O.
M	in steel embed:	FULL
M	in steel edge distance:	1/2" U.N.O.
M	in steel spacing:	1" U.N.O.

6. Unless stated within these drawings, all stud to track connections shall be (1) #10-16 self-drilling screw each flange or (1) 3/16" long stich weld each flange.

DECKING NOTES:

- 1. Plywood for wall & roof decking shall conform to the requirements in DOC PS 1 or PS 2. Each panel shall be identified for grade and glue type by the trademarks of an approved testing and grading agency. Wall and Roof decking shall be "5/8 inch ZIP Roof & Wall Sheathing". Screwing for plywood roof sheathing shall be #8 (min.) wood to CFS screws at 12 inches on center along plywood edges and 12 inches on center along intermediate members, unless noted otherwise (see Shearwall requirements and details). At roof plyclips shall be used at all free edges, one at mid-point between all supports.
- 2. Structural floor decking panels shall be "3/4 inch Structu-Crete" by USG (or equivalent). Screwing for panel sheathing shall be #8 (min.) wood to CFS screws at 8 inches on center along panel edges and 12 inches on center along intermediate members, unless noted otherwise.

DESIGN CRITERIA:

1. All design and construction work for this project shall conform to the 2021 International Building Code (IBC) and ASCE/SEI 7-16, Minimum Design Loads for Buildings and Other Structures. Design criteria:

105 mph
0.85
1.0
С
1
4 psf
C C
0.9
1.1
1.0
D
0.318
0.104
1.0
0.328
0.166
С
Steel moment frame and CFS x-braced shearwalls

FOUNDATION NOTES:

1. A soil investigation has not been performed for this project. All footing excavations shall be inspected by a Geotechnical Engineer prior to steel and concrete placement to assess whether the existing soils are adequate to achieve the bearing capacity utilized for design. Further, the bottom of all footing excavations shall be probed, density tested, and approved by a Geotechnical Engineer prior to placing steel reinforcing. Inadequate soils encountered at the bottom of the excavations shall be removed and the cavity backfilled with compacted select

2. Foundations shall bear a minimum of 18 inches below lowest adjacent finished grade on properly placed select fill or firm native soil with a net allowable bearing capacity of 2,000 PSF.

fill, flowable grout fill, crushed stone, concrete, or other approved material and placement control.

3. Contractor shall provide for dewatering at excavations from either surface water or seepage. Contractor shall provide adequate shoring to prevent cave-ins.

CONCRETE NOTES:

- 1. The concrete supplier shall submit concrete mix design data to the Architect for review prior to construction.
- 2. Materials shall conform with:
- A. Cement-ASTM C150 Type I or II
 B. Aggregate-ASTM C33
- C. Water Potable

3. Use the following table for guidance in preparing mix designs for the given type of pour:

CONCRETE MIX DESIGN PARAMETERS							
MIN. CEMENT CONTENT TYPE OF POUR 28 DAY COMPRESSIVE MAX. STRENGTH WCR MIN. CEMENT CONTENT TARGET SLUMP CONTENT SIZE							
all concrete	3000 psi	.53	470	6"	4% to 7%	1"	

4. Proportioning of concrete mix designs shall be determined by the procedures established in Section 5.3 of ACI 318. The concrete supplier shall submit concrete mix designs to the Architect/Engineer for review and approval prior to construction.

5. Slumps of pumped concrete placed without a pump aid admixture shall not exceed 6" at the pump hopper and shall not exceed the specified values at the discharge nozzle. In not case shall the concrete water-cement ratio be increased.

6. Flyash and other pozzolans shall conform to ASTM C-618 and shall not make up more than 20 percent of the total cementitious materials by weight. Do not use flyash in concrete when the temperature during placement or curing is projected to fall below 50° F.

7. Utilities which project through the slab on grade shall be wrapped with expansion joint material or shall be set with oversized sleeves such that the utility does not hamper the ability of the slab to expand and contract.

REINFORCING STEEL NOTES:

- 1. All reinforcing steel shall be new billet, ASTM A615 grade 60 deformed domestic bars. All rebar to be welded shall be ASTM A706. All detailing, fabrication, placing, and supporting shall be in accordance with ACI 318 and CRSI.
- 2. All dowels shall be the same size and spacing as adjoining main bars with a Class B lap splice, minimum unless noted of detailed otherwise. Splice all continuous bars with a Class B lap splice, minimum unless noted or
- 3. Clear minimum coverage of concrete over reinforcing bars shall be as follows unless noted or detailed otherwise:

concrete placed against earth	3 inches
formed concrete against earth	
beams to ties/stirrups	1 1/2 inches
top and bottom of suspended slabs	3/4 inches or bar dia

- 4. All reinforcing bars, W.W.F., bolts, dowels, inserts, etc., shall be rigidly secured in position prior to placing concrete
- 5. Contractor shall submit complete shop and placing drawings and obtain approval prior to fabrication.

CAST-IN-PLACE CONCRETE EXECUTION NOTES:

- 1. All concrete is reinforced unless specifically noted as 'unreinforced'. Reinforce all concrete not otherwise shown with the same steel as shown in similar sections. Comply with ACI 304, Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete.
- 2. Cold weather conditions: When air temperature has fallen to or is expected to fall below 40 deg. F, all concrete placement shall comply with the provisions of ACI 306 and as herein specified. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
- 3. Hot weather conditions: When air temperature exceeds 90 deg. F, all concrete shall comply with the provisions of ACI 305 and as herein specified.
- 4. Perform curing of concrete by curing and sealing compound, by moist curing, moisture-retaining cover curing, or by combinations thereof.
- 5. Coordinate concrete finishes, recessed areas, reveals, embedded items, special joint patterns, etc. with the Architectural drawings and specifications. No aluminum items shall be embedded in concrete.
- 6. All openings in concrete slabs shall be reinforced with (1) #3 rebar (opening dimension plus 2 feet each side) along each side of opening, and (1) #3 x 48 inches diagonally at each corner. Reinforce all re-entrant corners with (1) #3 x 48 inches diagonally. Add additional steel to match above for each layer of steel shown.

STRUCTURAL STEEL NOTES:

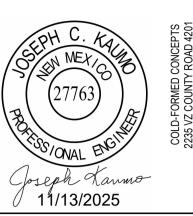
- 1. All structural steel design, fabrication, and erection shall conform to the latest edition of the AISC Manual of Steel Construction "Specification for Structural Steel Buildings Allowable Stress Design." Steel for wide flanges shapes shall conform to ASTM A992, hollow structural sections shall conform to ASTM A500 grade B, pipes shall conform to ASTM A53 grade B, all other structural steel shapes and plate shall conform to ASTM A36.
- 2. Steel members shall be adequately supported or held in position during welding. Procedure and sequence of welding shall be such that there shall be no distortion of members or buildup of localized stresses due to welding.
- 3. All structural bolts shall be 3/4"∅, ASTM A325-N, bearing type, tightened to the snug-tight condition, unless noted otherwise in the details. Pretensioned connections shall be made using either load indicating washers (DTI) or turn of the nut method. Installation and inspection shall be in strict accordance with sections 8.2.4 and 9.2.4 of the RCSC "Specification for Structural Joints Using High Strength Bolts". All bolt holes shall be standard size; 1/16" larger than the bolt diameter, unless noted
- 4. All structural connections shall be seal welded with a minimum 3/16" fillet weld. All connections requiring butt welds shall be a minimum 1/4" partial penetration welds. All welds shall be continuous along all edges or surfaces in contact with each other. Any exceptions to these requirements shall be noted on the specific details for the affected joint.
- 5. All welding shall conform to the recommendations of the AWS, and all welds, including field, shall be made only by certified welders using E7OXX electrodes.
- 6. All holes cut in structural steel shall be drilled or punched. Burned holes are not acceptable.
- 7. The corners of all continuity plates and stiffener plates placed in the webs of rolled shapes shall be clipped. Along the web, the clip shall be detailed so that the clip extends a distance of at least 11/2" beyond the 'k' dimension. Along the flange, the clip shall be detailed so that the clip does not exceed a distance of 1/2" beyond the 'k1' dimension. The clip shall be detailed to facilitate suitable weld terminations for both the flange weld and the web weld. If a cured slip is used, it shall have a minimum radius of 1/2".
- 8. All structural steel shall have one shop coat of rust inhibitor primer paint conforming to the specifications. Field touch up all unpainted, nicked and welded areas.
- 9. All structural steel exposed to outside elements shall be primed and painted per Architectural's specifications or shall be hot-dipped galvanized after fabrication. Field touch up all ungalvanized, nicked, and painted areas with two (2) coats of cold galvanizing paint.
- 10. Provide weep holes in steel for moisture control as needed.

DESIGN CRITERIA (C&C Unfactored @ 10 sqft) 1.) "a" distance (ZONE #5) = 10% max(building length) **C&C WIND PRESSURES** 24.6 psf // 30.2 psf C&C WALL (ZONE 4 // ZONE 5) C&C WL (PARAPET) 57.3 psf 26.9 psf // 37.4 psf // ROOF (UPLIFT ZONE 1 // ZONE 2 // ZONE 3) 58.4 psf **GRAVITY LOADS** Roof Live Load (Roof) 30 psf 15 psf Roof Dead Load (Roofing + Deck + Clg + Misc) 50 psf Floor Live Load (Typical) 20 psf Floor Dead Load (Flooring+ Deck + Clg + Misc) 10 psf Wall Weight DEFLECTION Walls (Standard Finish // Masonry) 1/360 // 1/600 1/360 // 1/480 Flooring (TL // LL) Roofing (TL // LL) 1/240 // 1/380 Non-Load Bearing Walls (TL // LL) 1/120// 1/280

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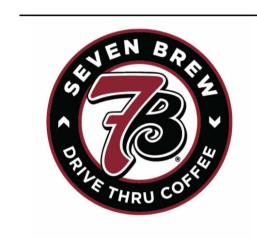
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BUILDING MANUFACTURER



REDGUARD MANUFACTURING, ID - 0059052 TENNESSEE MODULAR PLAN # : RG-010



2122 CARLISLE BLVD

DRIVE

# [Date	Issue/Description
0	11/13/2025	FOR PERMIT

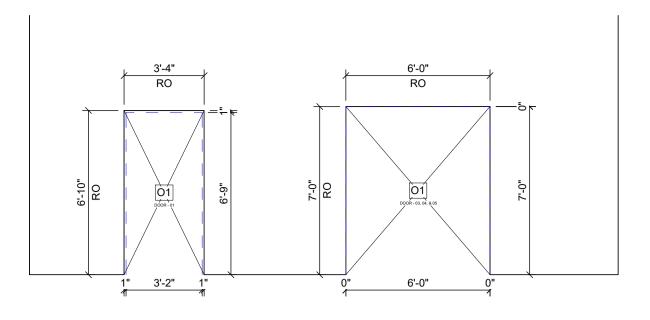
 Project No:
 2536

 Drawn By:
 JCK

 Checked By:
 JCK

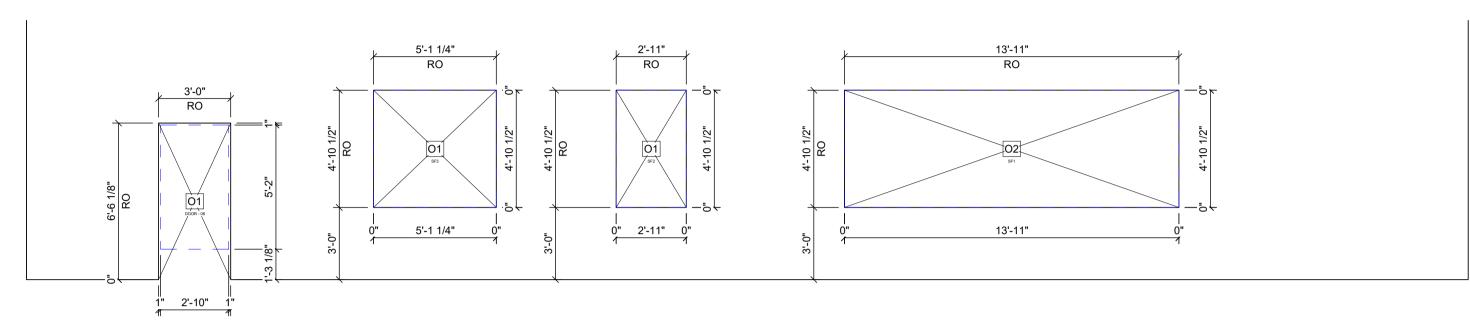
GENERAL NOTES

S1.0



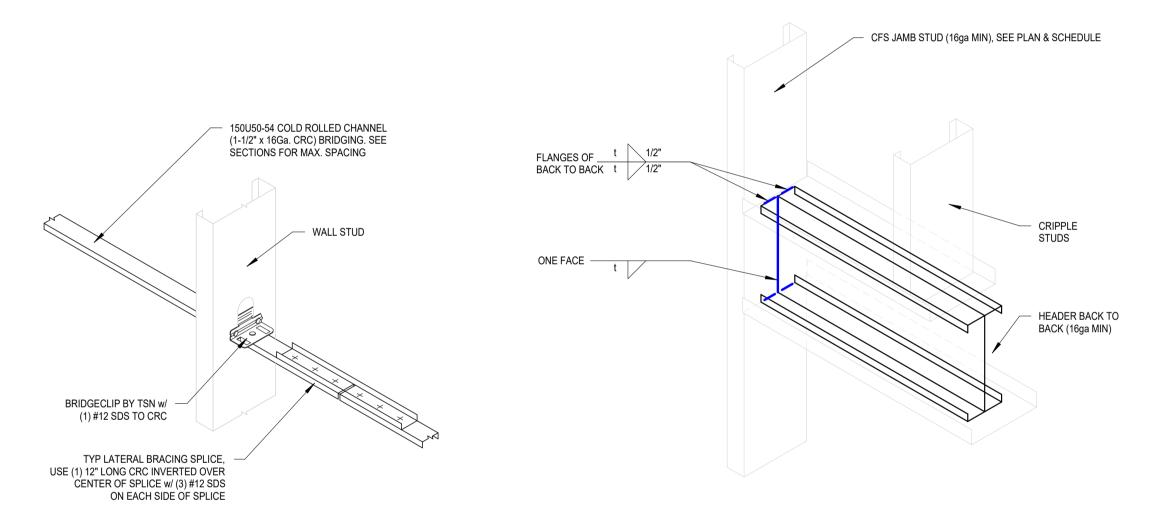
OPENINGS - BASE OF PANEL

\$1.1 1/4" = 1'-0"



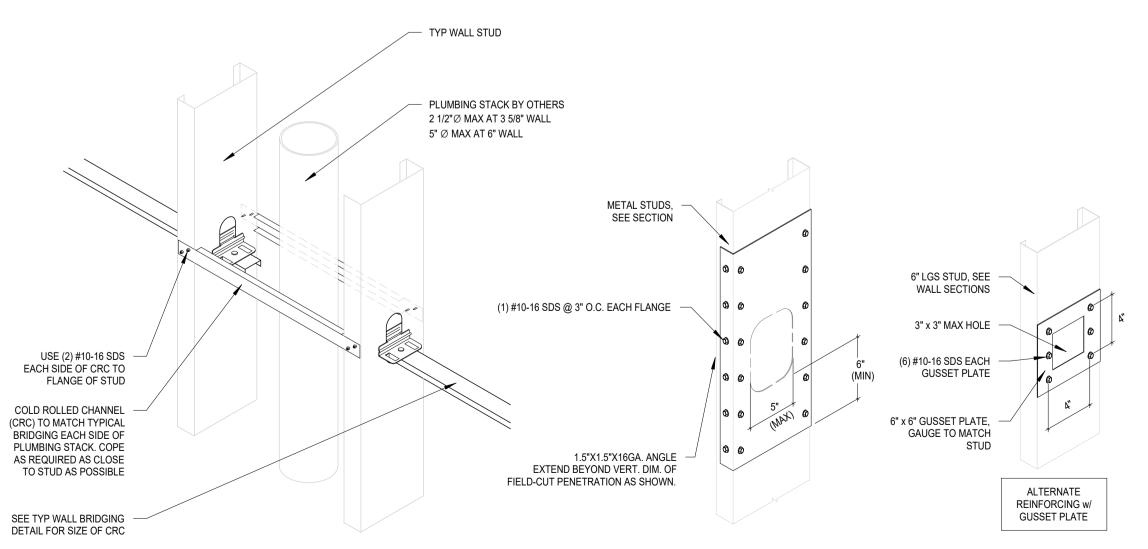
OPENINGS - PUNCHED

\$1.1 1/4" = 1'-0"



TYP WALL BRIDGING DETAIL

WELDED HEADER TO JAMB (B2B)



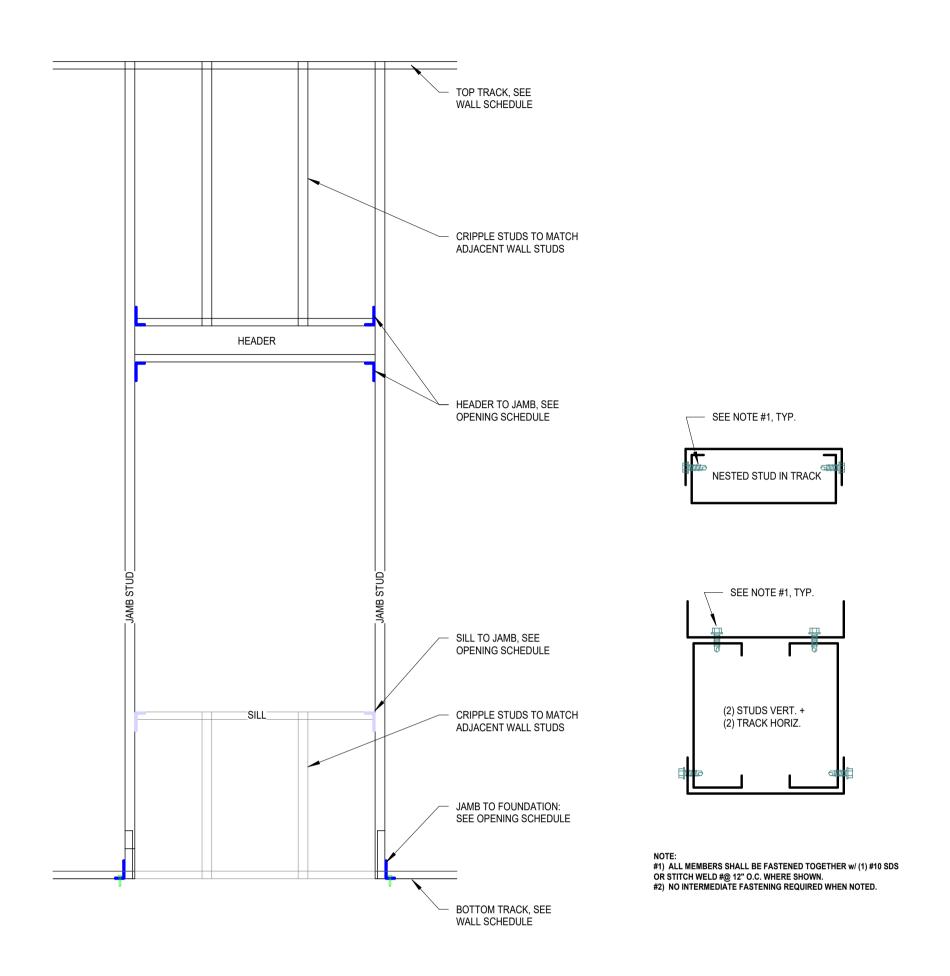
BRIDGING REPAIR AT PLUMBING STACK

REPAIR DETAIL AT FIELD-CUT STUD PENETRATION

3 TYPICAL CFS ENGINEERING DETAILS
S1.1 11/2" = 11.0"

\$1.1 1 1/2" = 1'-0"

OPENING ENGINEERING SCHEDULE ENG **HEADER END CNNX** SILL END CNNX MARK (2) 600S162-54 VERTICAL + 600S162-54 | 600T125-43 | WELDED HEADER, SEE TYPICAL DETAILS (1) SIMPSON SSC4.25 w/ <varies> (4) #12 SDS EACH LEG4 (2) 600S162-54 VERTICAL + 600S162-54 600T125-68 WELDED HEADER, SEE TYPICAL DETAILS (1) SIMPSON SSC4.25 w/ (4) #12 SDS EACH LEG4 O3 362S162-68 NESTED IN TOP 362S162-54 INFILL ABOVE DOOR AS REQURED





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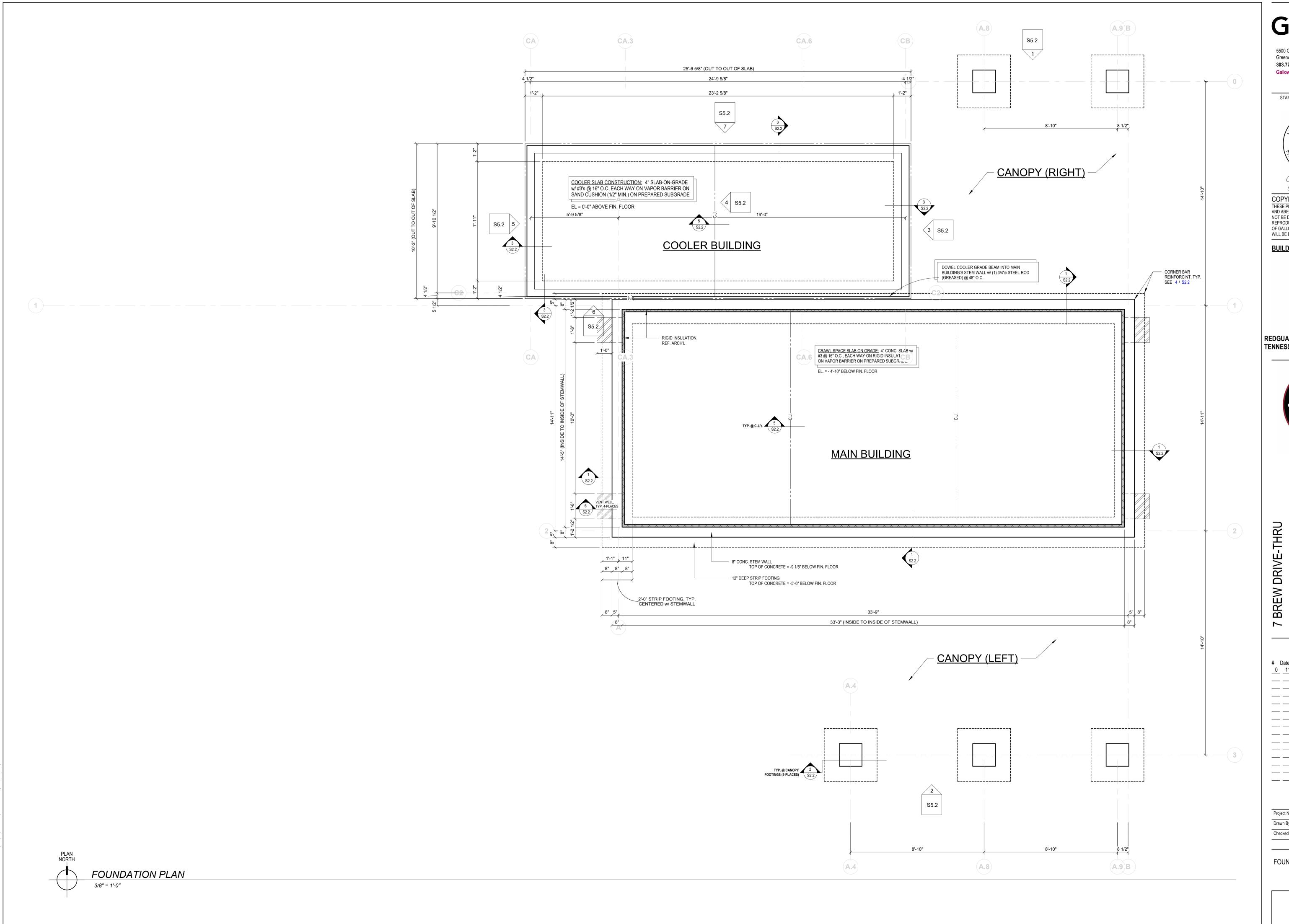


2122 CARLISLE BLVD ALBUQUERQUE, NEW

BREW DRIVE-THRU

	Date 11/13/2025	Issue/Description FOR PERMIT
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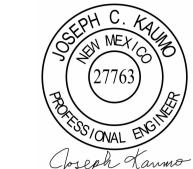
OPENINGS AND OPENINGS **ENGINEERING**



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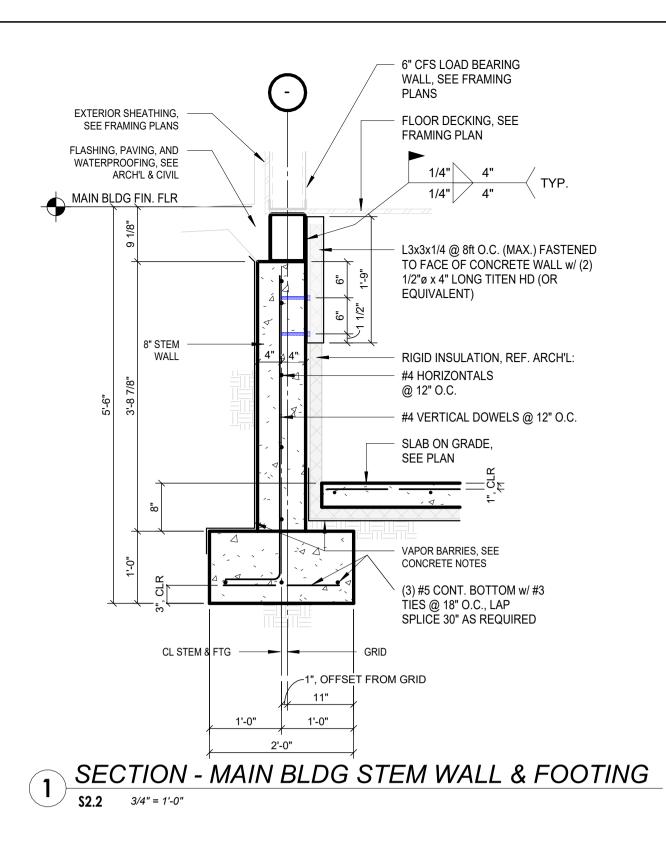
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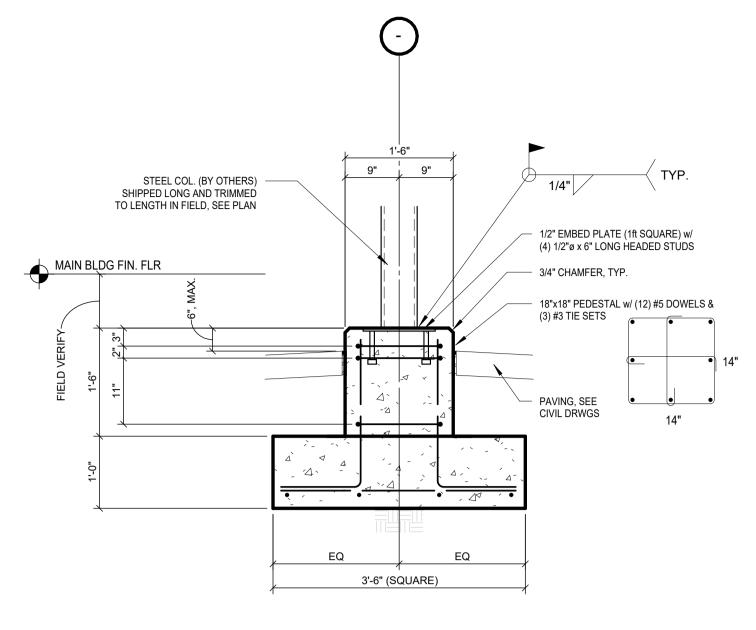


	Date _11/13/2025_	Issue/Description FOR PERMIT

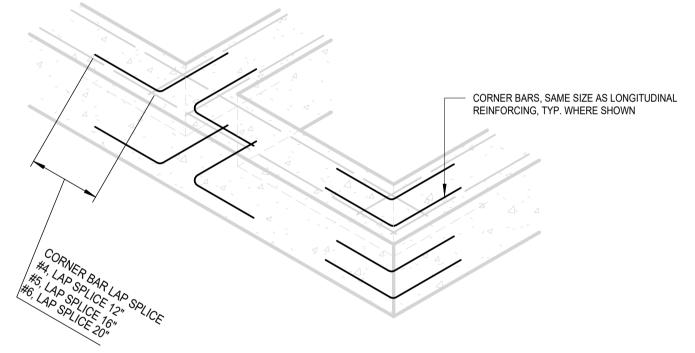
Project No:	253
Drawn By:	JC
Checked By:	JC

FOUNDATION PLAN - FDN



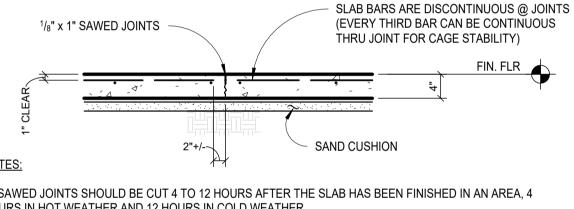


2 SECTION - DRIVE THRU FTG
S2.2 3/4" = 1'-0"



1. CORNER BARS ARE REQUIRED IN ALL CONCRETE BEAMS, WALLS, AND CMU BONDBEAMS. 2. TOP STEEL ONLY IS DEPICTED IN THIS DETAIL, BUT CORNER BARS ARE REQUIRED FOR ALL LEVELS OF

4 DETAIL - CORNER BARS
S2.2 3/4" = 1'-0"

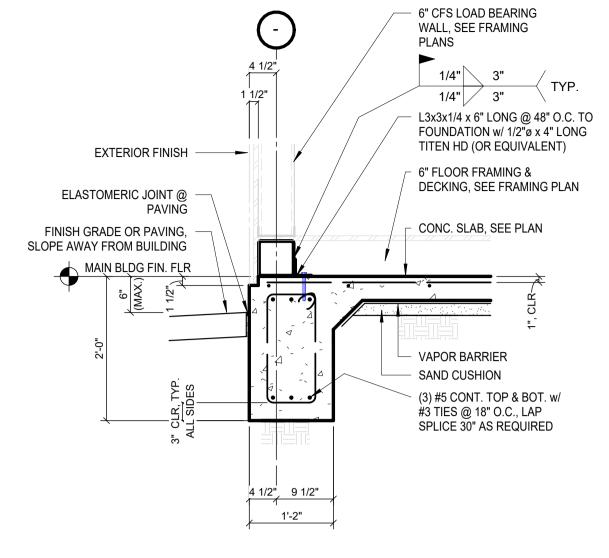


1. SAWED JOINTS SHOULD BE CUT 4 TO 12 HOURS AFTER THE SLAB HAS BEEN FINISHED IN AN AREA, 4 HOURS IN HOT WEATHER AND 12 HOURS IN COLD WEATHER.

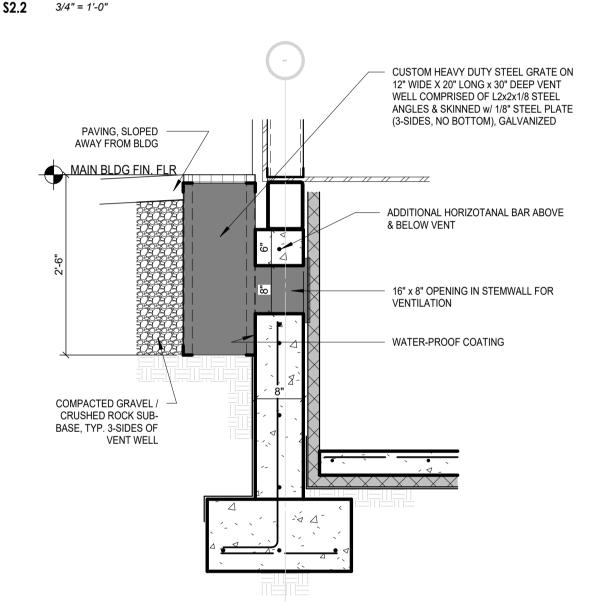
2. ALL SUBGRADE RUTTING SHALL BE REPAIRED PRIOR TO SLAB PLACEMENT.

3. JOINT SEALANT NOT REQUIRED.

5 DETAIL - SLAB CONTRACTION JOINT (C.J.) 4"



SECTION - COOLER GRADE BEAM

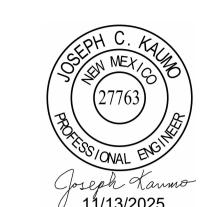


6 SECTION - CRAWL SPACE VENT WELL

S2.2 3/4" = 1'-0"



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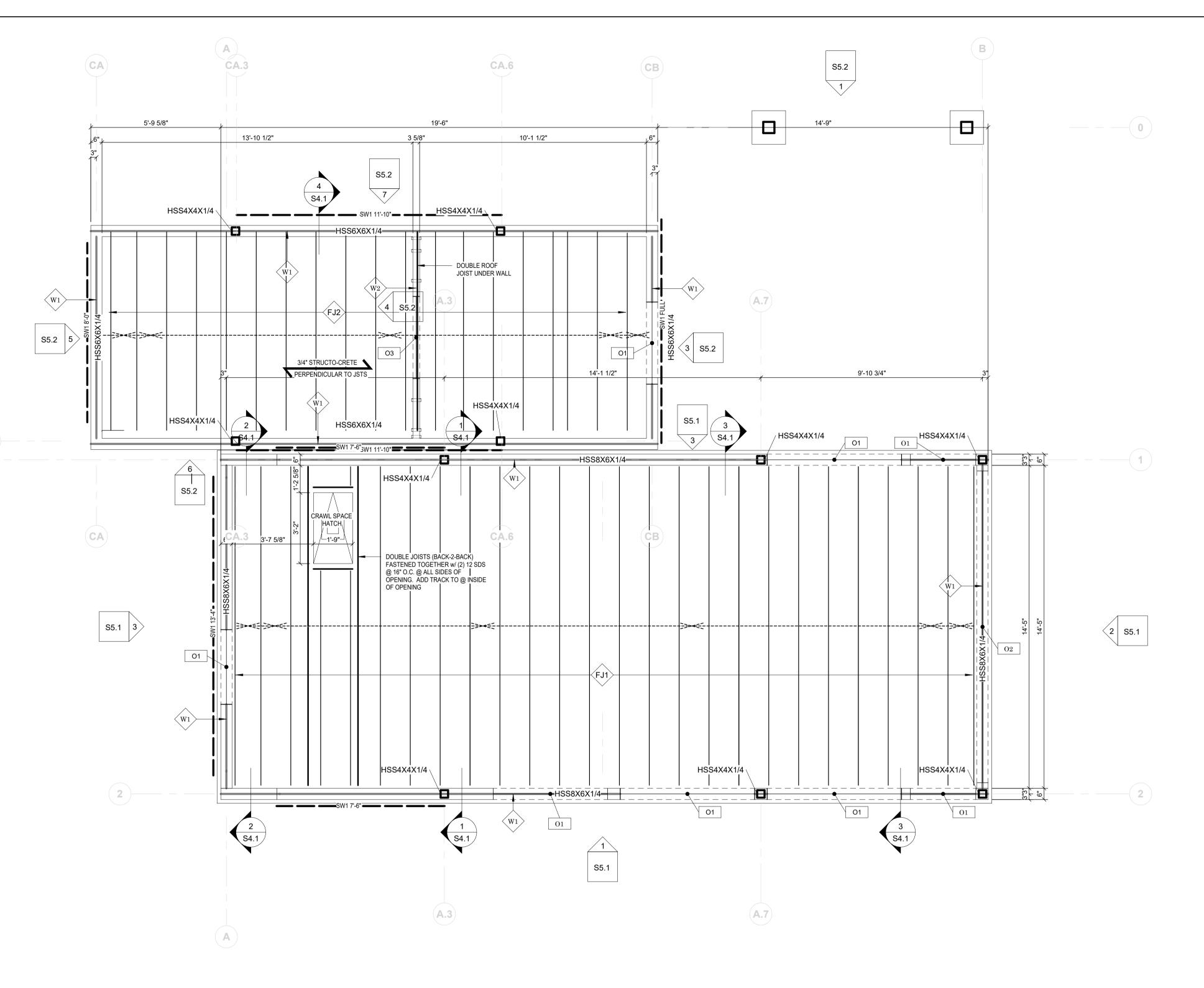
Checked By:

FOUNDATION DETAILS

	WALL SCHEDULE - 7BREW							
MARK	STUDS	BOTTOM TRACK / JOIST RIM TRACK	TOP TRACK / JOIST RIM TRACK	BRIDGING & MAX. SPACING				
CJ1	800S162-54 @ 16" O.C.	800T125-54	800T125-54	BRIDGING MID-SPAN SEE 5/S6.1				
FJ1	800S162-68 @ 16" O.C.	800T125-68	800T125-68	BRIDGING MID-SPAN SEE 5/S6.1				
FJ2	600S162-54 @ 16" O.C.	600T125-54	600T125-54	BRIDGING MID-SPAN SEE 5/S6.1				
RJ1	800S162-54 @ 16" O.C.	800T125-54	800T125-54	BRIDGING MID-SPAN SEE 5/S6.1				
RJ2	1000S162-54 @ 16" O.C.	CUSTOM 16GA RADIUS TRACK	CUSTOM 16GA RADIUS TRACK	BRIDGING MID-SPAN SEE 5/S6.1				
RJ3	600S162-54 @ 16" O.C.	600T125-54	600T125-54	NOT REQ'D				
W1	600S162-43 @ 16" O.C.	600T125-43	600T125-43	150U50-54 @ 60" O.C.				
W2	362S162-43 @ 16" O.C.	362T125-43	362T125-43	150U50-54 @ 60" O.C.				

	OPENING ENGINEERING SCHEDULE							
ENG MARK	HEADER	JAMB	SILL	HEADER END CNNX	SILL END CNNX	NOTES		
01	(2) 600S162-54 VERTICAL + (2) 600T125-43 HORIZONTAL		600T125-43	WELDED HEADER, SEE TYPICAL DETAILS	(1) SIMPSON SSC4.25 w/ (4) #12 SDS EACH LEG4	<varies></varies>		
O2	(2) 600S162-54 VERTICAL + (2) 600T125-43 HORIZONTAL	600S162-54	600T125-68	WELDED HEADER, SEE TYPICAL DETAILS	(1) SIMPSON SSC4.25 w/ (4) #12 SDS EACH LEG4			
О3	362S162-68 NESTED IN TOP TRACK	362S162-54				INFILL ABOVE DOOR AS REQURED		

	SHEARWALL-SCHEDULE						
MK	SW END POST	SHEATHING	HOLDDOWN				
SW1	(1) 600\$162-68	5/8 ZIP	EDGE FASTENERS @ 6" O.C. // INTERMEDIATE FASTENERS @ 12" O.C.				



FRAMING PLAN - L1 (GROUND)

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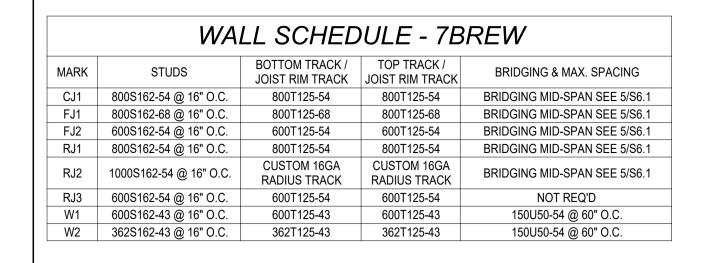
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Date 11/13/2025	Issue/Description FOR PERMIT

Project No:	2536
Prawn By:	JCK
Checked By:	JCK

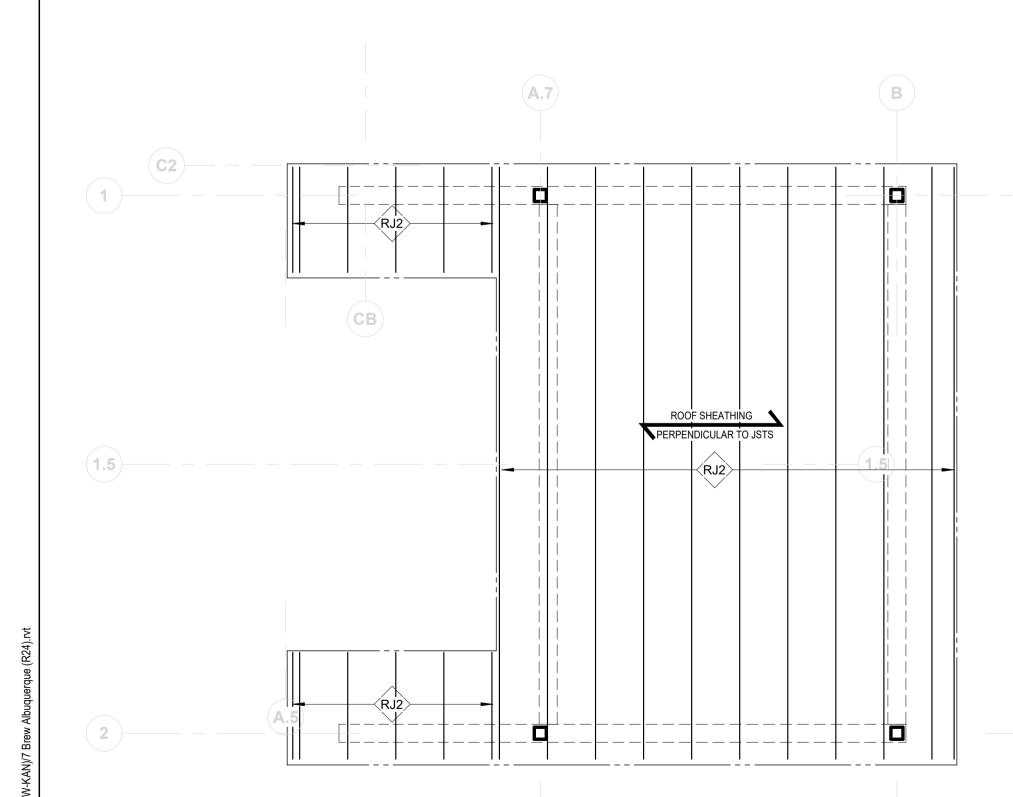
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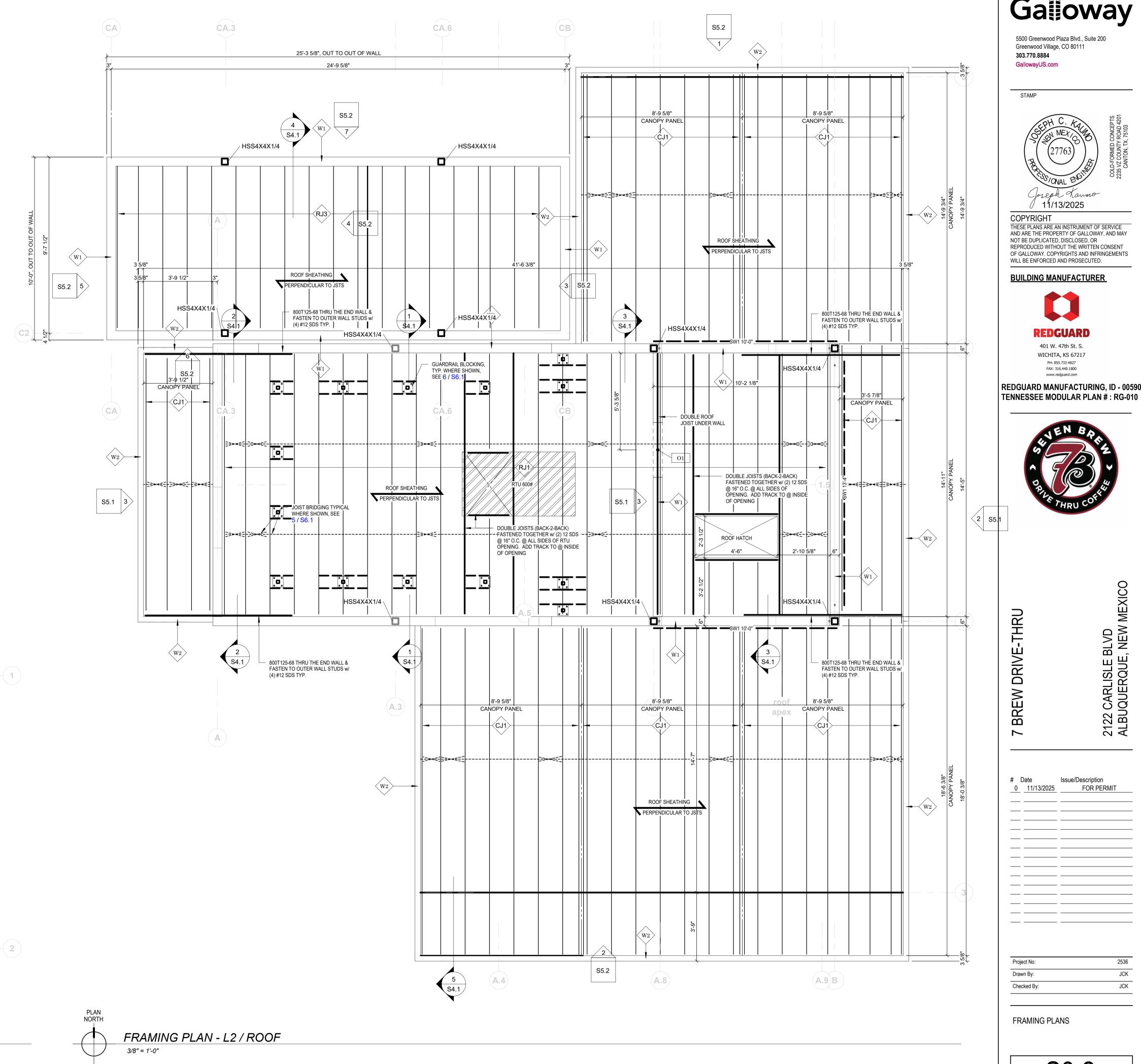
	OPENING ENGINEERING SCHEDULE								
ENG MARK	HEADER	JAMB	SILL	HEADER END CNNX	SILL END CNNX	NOTES			
01	(2) 600S162-54 VERTICAL + (2) 600T125-43 HORIZONTAL	600S162-54	600T125-43	WELDED HEADER, SEE TYPICAL DETAILS	(1) SIMPSON SSC4.25 w/ (4) #12 SDS EACH LEG4	<varies></varies>			
O2	(2) 600S162-54 VERTICAL + (2) 600T125-43 HORIZONTAL	600S162-54	600T125-68	WELDED HEADER, SEE TYPICAL DETAILS	(1) SIMPSON SSC4.25 w/ (4) #12 SDS EACH LEG4				
О3	362S162-68 NESTED IN TOP TRACK	362S162-54				INFILL ABOVE DOOR AS REQURED			

	SHEARWALL-SCHEDULE			
MK	SW END POST	SHEATHING	HOLDDOWN	
SW1	(1) 600S162-68	5/8 ZIP	EDGE FASTENERS @ 6" O.C. // INTERMEDIATE FASTENERS @ 12" O.C.	

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FAX: 316.440.1800

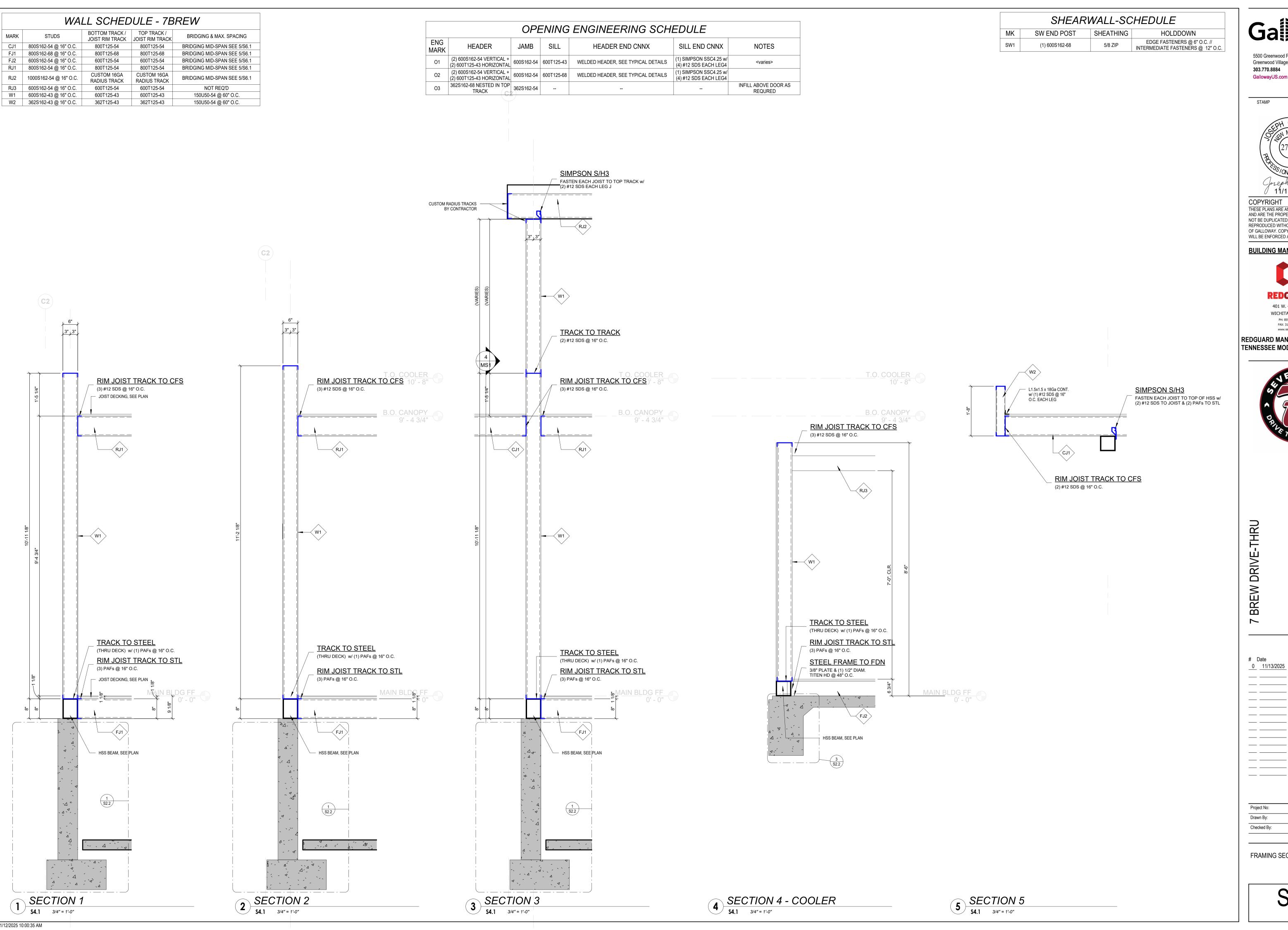
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Issue/Description # Date

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S3.2



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2122 CARLISLE BLVD ALBUQUERQUE, NEW

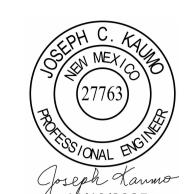
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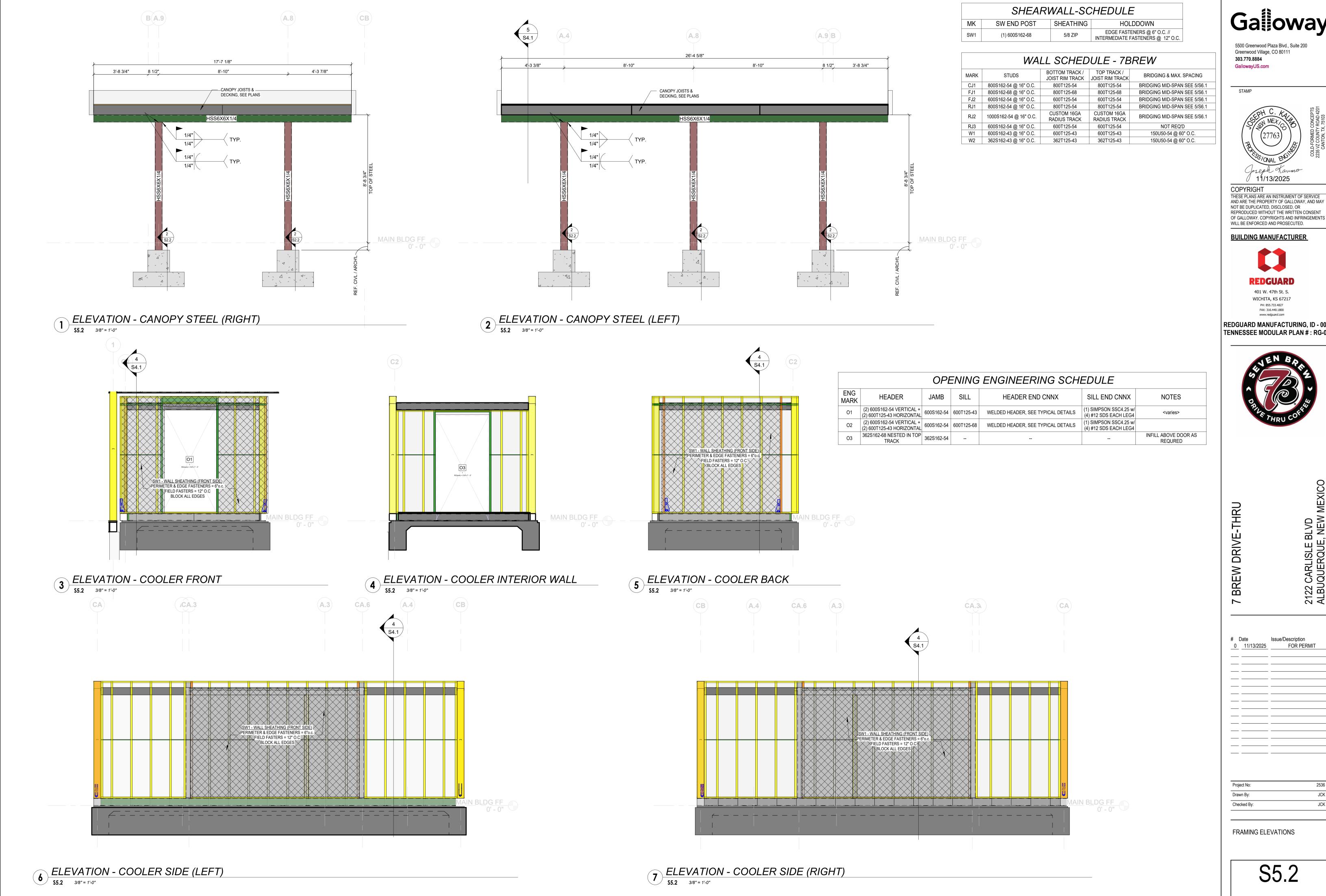


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Issue/Description

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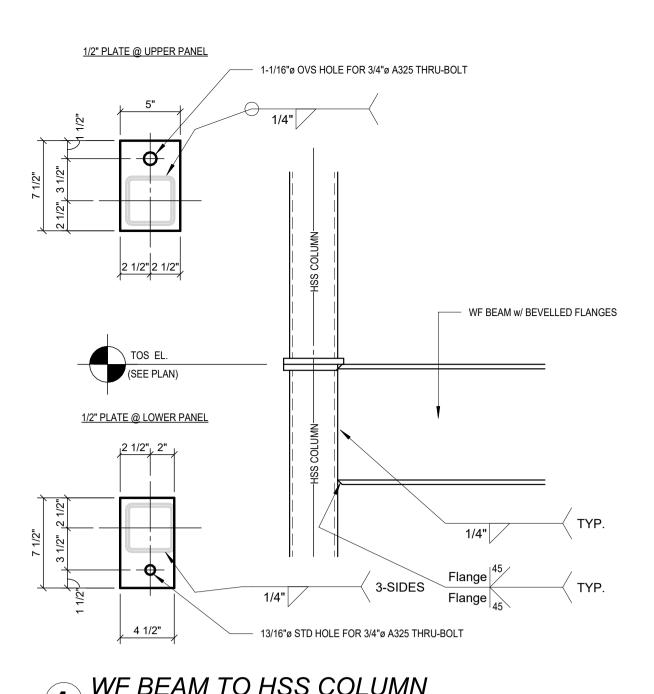
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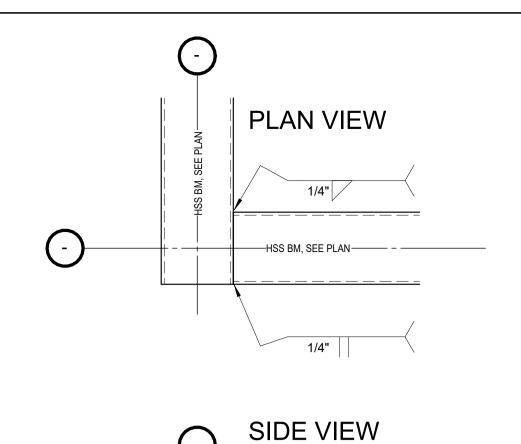


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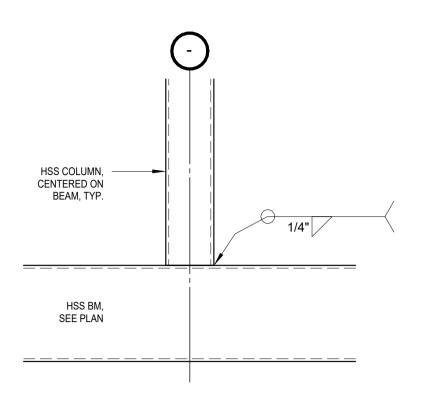
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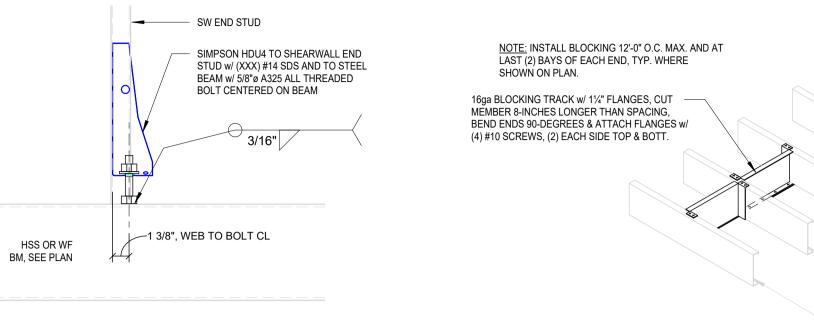




1/4"

HSS BM, SEE PLAN







1 WF BEAM TO HSS COLUMN
S6.1 1 1/2" = 1'-0"

2 HSS BEAM TO HSS BEAM S6.1 11/2" = 1'-0" 3 HSS COLUMN TO HSS BEAM S6.1 1 1/2" = 1'-0" **4** SW BOOT TO STEEL

\$6.1 1 1/2" = 1'-0"

5 CFS JOISTS - BRIDGING
S6.1 3/4" = 1'-0"

REDGUARD

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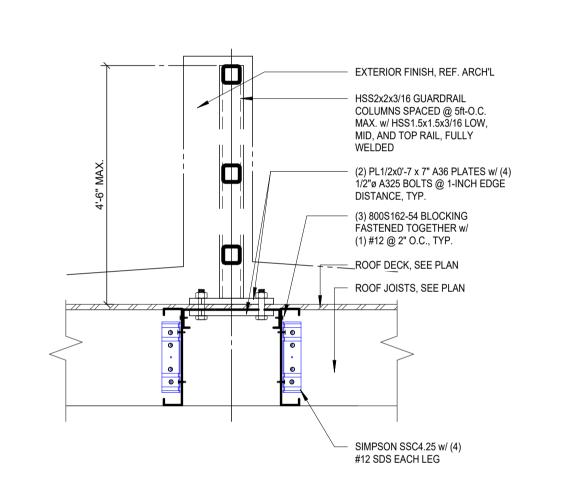
BREW DRIVE-THRU

Date Issue/Description
O 11/13/2025 FOR PERMIT

roject No: 2536
rawn By: JCK
hecked By: JCK

FRAMING DETAILS

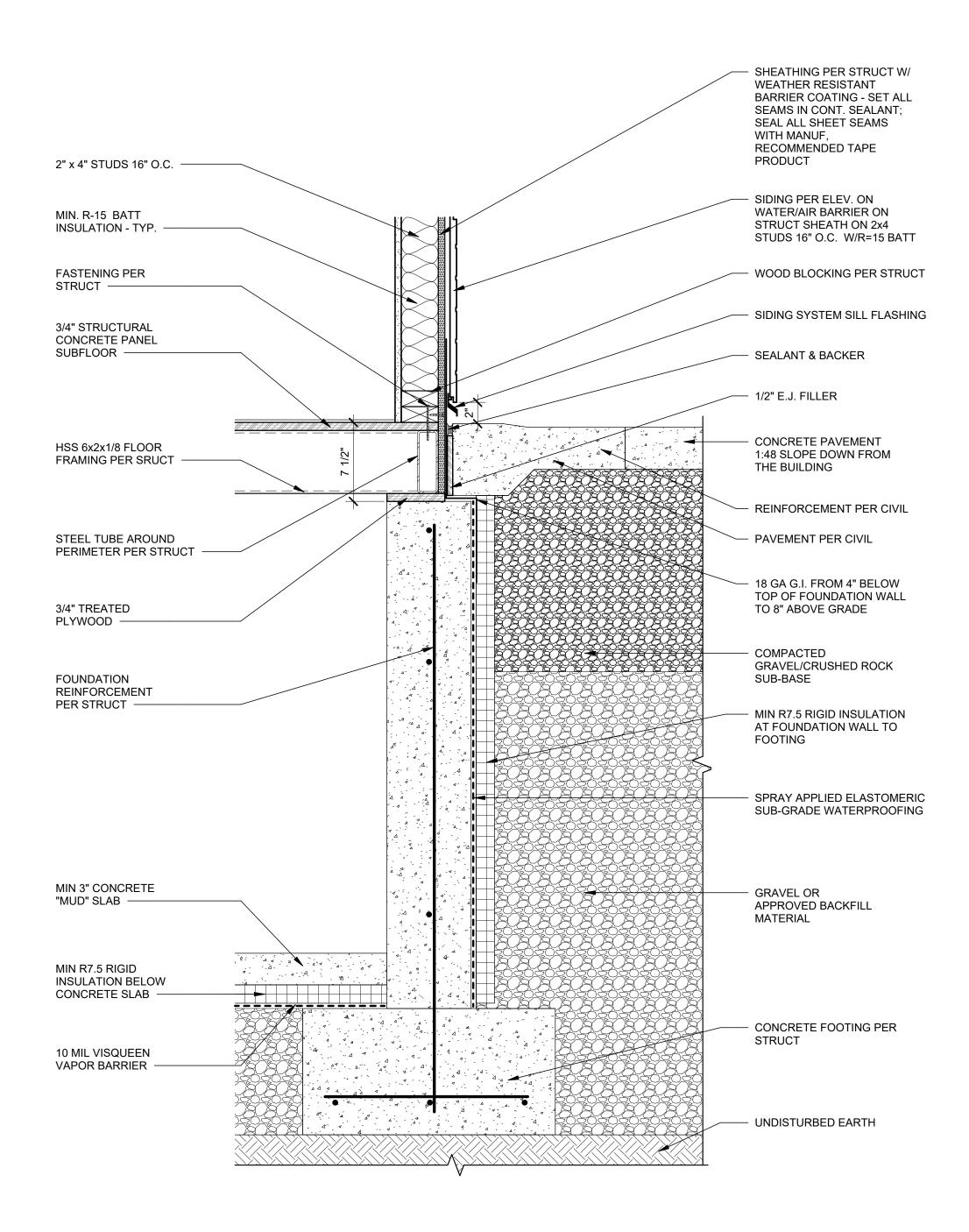
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sk Docs://7 BREW ALBUC



2 FOUNDATION AT REAR

SHEATHING PER STRUCT W/ WEATHER RESISTANT BARRIER COATING - SET ALL SEAMS IN CONT. SEALANT; SEAL ALL SHEET SEAMS WITH MANUF, RECOMMENDED TAPE PRODUCT 2" x 4" STUDS 16" O.C. SIDING PER ELEV. ON WATER/AIR BARRIER ON STRUCT SHEATH ON 2x4 STUDS 16" O.C. W/R=15 BATT MIN. R-15 BATT INSULATION - TYP. —— - WOOD BLOCKING PER STRUCT CONNECTION SIDING SYSTEM SILL FLASHING PER STRUCT -SEALANT & BACKER 3/4" STRUCTURAL CONCRETE PANEL - 1/2" E.J. FILLER SUBFLOOR -STEEL FLOOR JOISTS - CONCRETE PAVEMENT PER SRUCT -1:48 SLOPE DOWN AWAY FROM THE BUILDING STEEL TUBE AROUND PERIMETER PER STRUCT -- PAVEMENT PER CIVIL 3/4" TREATED PLYWOOD 18 GA G.I. FROM 4" BELOW TOP OF FOUNDATION WALL STEEL ANGLE CLIP
PER STRUCT ——— TO 8" ABOVE GRADE (2) 1/2" DIA. x4" SIMPSON TITEN HD - COMPACTED GRAVEL/CRUSHED ANCHORS, TYP. — ROCK SUB-BASE - MIN R7.5 RIGID INSULATION AT FOUNDATION WALL TO FOOTING SPRAY APPLIED ELASTOMERIC SUB-GRADE FOUNDATION WATERPROOFING REINFORCEMENT PER STRUCT -- GRAVEL OR APPROVED BACKFILL MATERIAL MIN 3" CONCRETE "MUD" SLAB -MIN R7.5 RIGID **INSULATION BELOW** - CONCRETE FOOTING CONCRETE SLAB PER STRUCT 10 MIL VISQUEEN VAPOR BARRIER -- UNDISTURBED EARTH

1

FOUNDATION DETAIL AT SIDE WALLS - FLUSH GRADE

1/2" = 1'-0"

Gallowa

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2122 CARLISLE BLVD ALBUQUERQUE, NEW MEXICO

DRIVE-THRU

# Date 11/10/25	Issue/Description

Project No:	61P000006.30
Drawn By:	VI
01 1 15	101
Checked By:	KM
Date:	05/16/25
Duic.	03/10/23

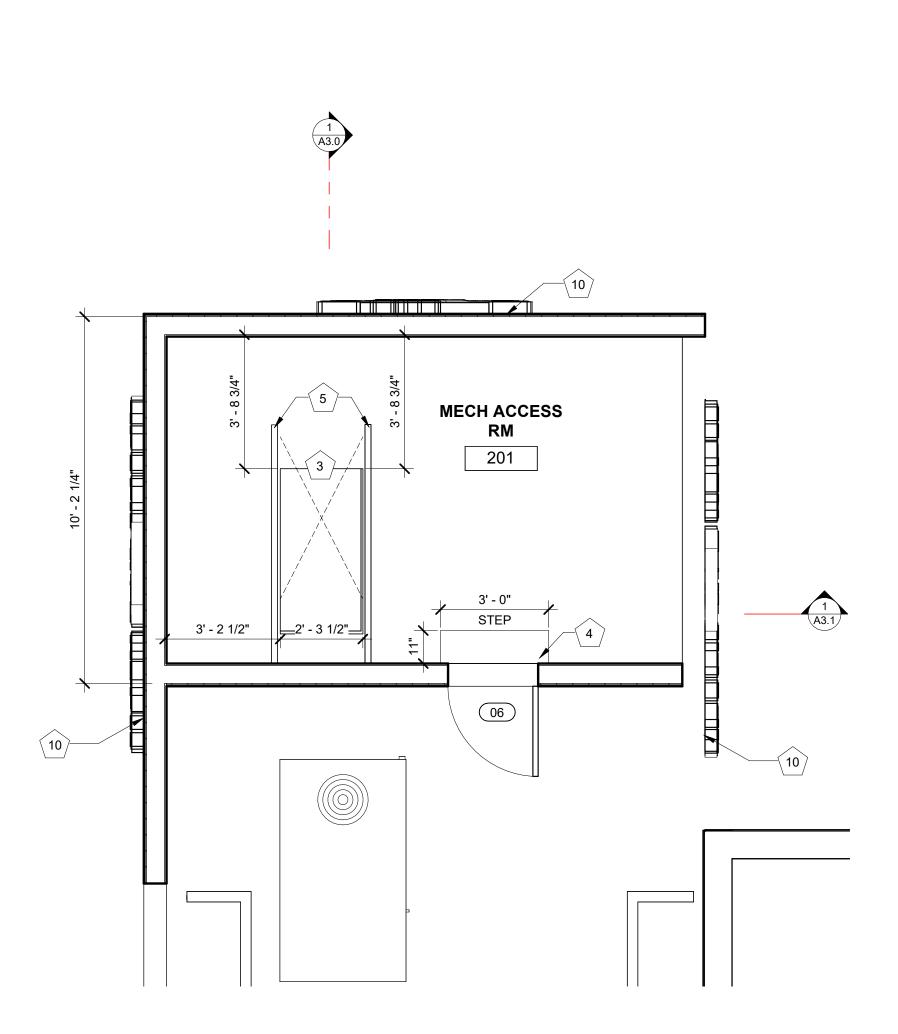
FOUNDATION DETAILS

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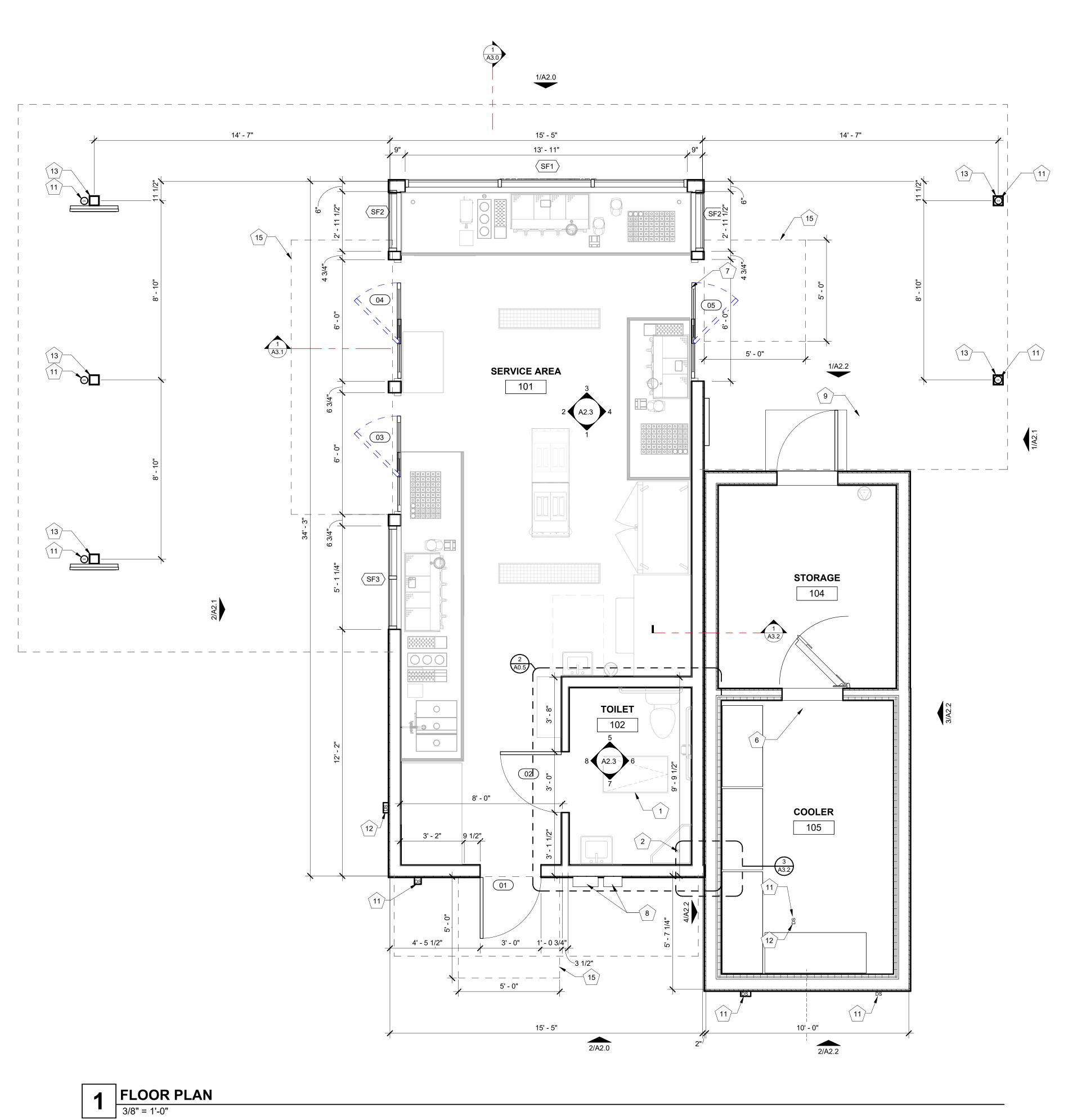
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Note Number Note Text

1	ACCESS DOOR FOR CRAWL SPACE ACCESS
2	MOP SINK RE: PLUMBING DRAWINGS
3	MECH. ACCESS DOOR AND LADDER - SUPPLIED BY OWNER
4	STEP, CENTER ON DOOR
5	PREFABRICATED COMPLIANT MECHANICAL SERVICE GUARDRAIL PER IBC SECTION 1015 - EACH SIDE
6	NATIONAL MODULAR MANUFACTURING PREFABRICATED COOLER W/ STORAGE; COORDINATE LOCATION AND SPECIFICATIONS WITH CIVIL AND STRUCTURAL
7	ADA AUTO/MANUAL EGRESS CAPABLE
8	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; SEE ELECTRICAL
9	RUBBERIZED RAMP TO COOLER DOOR LESS THAN 36" RUN LENGTH
10	STOREFRONT SIGNS - SUPPLIED AND INSTALLED BY SIGN CONTRACTOR
11	DOWNSPOUT CONNECTION TO GRADE; REF CIVIL
12	DOWNSPOUT DRAIN TO GRADE; REF CIVIL
13	CONTRACTOR TO COORDINATE CIVIL AND STRUCTURAL DRAWINGS TO ENSURE ALL CANOPY COLUMN FOUNDATION PLATES AND BOLTS ARE CONSTRUCTED IN A MANNER THAT CONCEALS THEIR CONNECTIONS COMPLETELY BELOW GRADE; TYP
15	FROST-PROTECTED LANDING; FLUSH WITH SURROUNDING PAVEMENT; PROVIDE EXPANSION JOINT AT EDGES



MECH ACCESS RM3/8" = 1'-0"

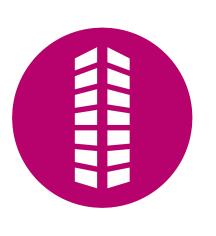


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2122 CARLISLE BLVD ALBUQUERQUE, NEW MEXICO

7 BREW DRIVE-THRU (GATE

#	Date11/10/25	Issue/Description
_		

Project No:	61P000006.30
Drawn By:	VI
Checked By:	KM
Date:	05/16/25

FLOOR PLAN

A1.2

EQUI	EQUIPMENT AND FIXTURE SCHEDULE					
ITEM NO.	QTY.	MANUFACTURER	PRODUCT	PRODUCT NO.	SIZE	NOTES
EQ-1	1	NATIONAL MODULAR MANUFACTURING	REMOTE WALK-IN STORAGE /COOLER	CUSTOM	202 SQUARE FEET	
EQ-1.2	1	SUPPLIED WITH COOLER	WALK-IN CONDENSER			
EQ-2	1	BUNN WATER HEATER	HOT WATER MACHINE	H5X - ELEMENT		
EQ-3	1	LA MARZOCCO	ESPRESSO MACHINE	LINEA PB (AV) - 3		
EQ-4	2	LA MARZOCO	ESPRESSO MACHINE	LINEA PB (AV) - 4		
EQ-5	2	MANITOWOC	ICE MAKER HEADS	IYF 1800 C		А
EQ-6	1	MANITOWOC	ICE MAKER BIN	LB 1760	60"	
EQ-7	27	TORRANI	SYRUP RACK			С
EQ-8	3	VITAMIX	BLENDER			С
EQ-9	3	STAINLESS STEEL SHELVING UNITS	STAINLESS STEEL STORAGE SHELVING		(A) SS 42" X 36" X 36" (B) SS 36" X 60" X 72" (C) SS 12" X 36" X 80"	В
EQ-10	2	SPACEMAN	CHILLER MACHINE	6695-C		
EQ-10.1	1	SPACEMAN	STAND/ ROLLING CART	CART - 550		
EQ-11	3	MAZZER	COFFEE BEAN GRINDER	ROBUR S NERO		
EQ-12	1	MAZZER	DECAF COFFEE BEAN GRINDER	SUPER JOLLY PRO V (E) NERO		
EQ-13	3	RUBBERMAID	TRASH CONTAINER			С
EQ-14	1	ATOSA	REACH-IN COOLER	MCF8723GR	54"	В
EQ-15	3	LA CROSSR	MOBILE ICE BINS	513034 CL-24ICCAB-31	36"	В
EQ-16	1	TRAULSEN	UNDERCOUNTER COOLER	CULC-36R-GD	36"	В
EQ-17	3	STRONGWAY	AIR CURTAIN	49947	36"	D
EQ-18	4	BLEND TECH	RAPID RINSER			В
EQ-19	3	T&S BRASS	RINSE WELL W/ STEM	B-2282-01-F05		
EQ-20	1	ATOSA	HAND WASH SINK	MRS-HS-18(W)	18" X 14" X 5"	В
EQ-21	2	EPOXY COATED WALL SHELF	WALL MOUNTED SHELF		48" X 14"	В
EQ-22	4	EPOXY COATED SHELVING UNIT	COOLER SHELVING		(2) 24" X 48" (2) 24" X 60"	В
EQ-23	1	STAINLESS WALL SHELF	WALL MOUNTED SHELF		36" X 14"	В
EQ-24	1	MULTI PURPOSE DRY CHEMICAL (2A:10BC) FIRE EXTINGUISHER	FIRE EXTINGUISHER	PER NFPA 10		С

GENERAL SCHEDULE NOTES:

ALL EQUIPMENT TO BE INSTALLED BY A LICENSED INSTALLER AND TO THE MANUFACTURERS SPECIFICATIONS

EQUIPMENT SCHEDULE NOTES:

A. REMOTE CONDENSER - IF 1800C B. EQUIPMENT MANUFACTURER SPEC IS OPTIONAL BUT MUST BE EQUAL APPROVED BY 7BREW - U.N.O.

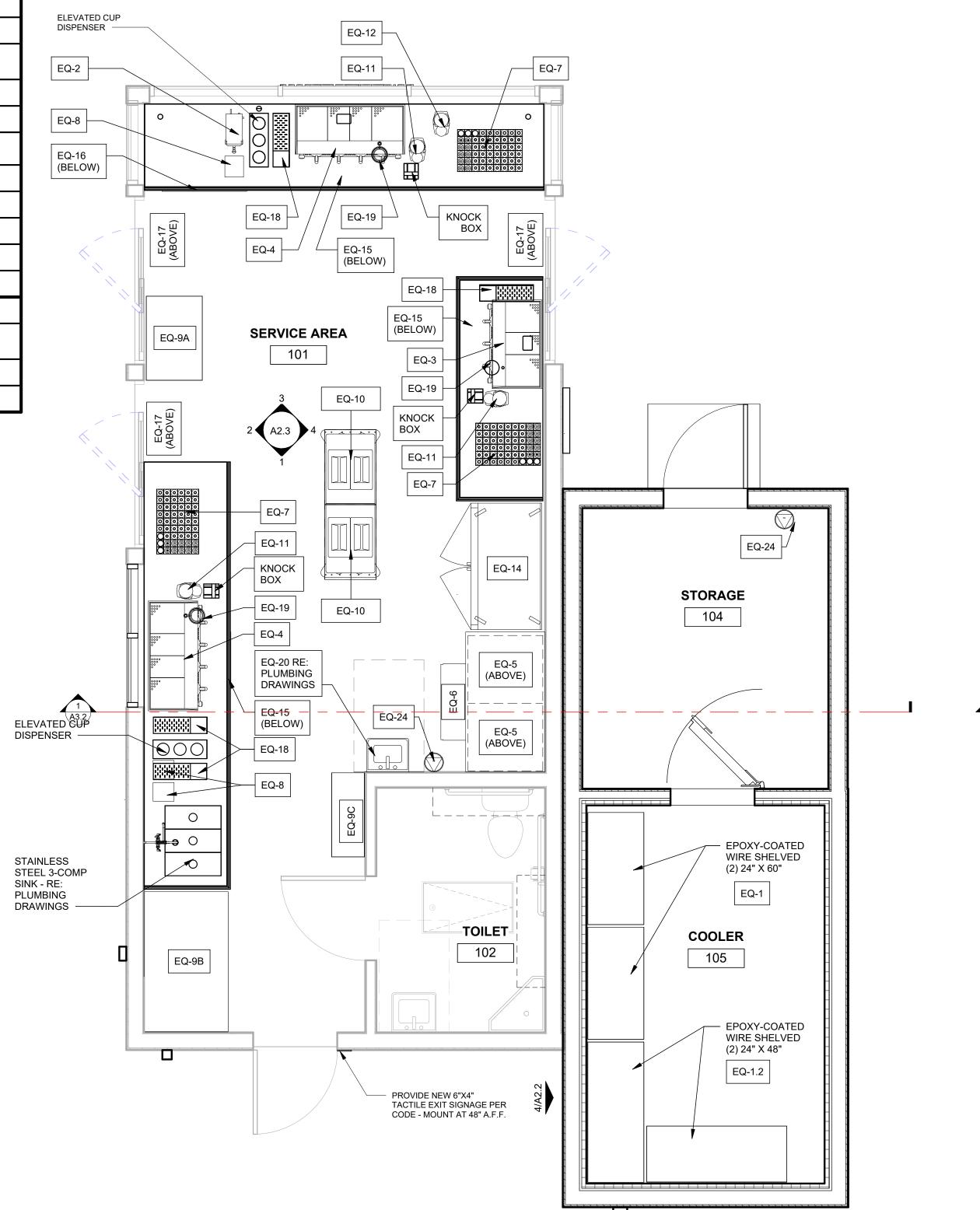
C. PROVIDED BY SMALLWARES PROVIDER
D. PROVIDED BY BUILDING MANUFACTURER

FINISH MATERIALS SCHEDULE				
CODE	ITEM	DESCRIPTION	REMARKS	
BRK-1	FIBER-CEMENT PANEL SIDING	BRAND: NICHIHA COLOR: MIDNIGHT STYLE: MODERN BRICK	EXTERIOR WAINSCOT AND REAR WALL a., d.	
BRK-2	FIBER-CEMENT PANEL SIDING	BRAND: NICHIHA COLOR: SHALE BROWN STYLE: CANYON BRICK	EXTERIOR WALLS ABOVE WAINSCOT & ATTIC REAR b.	
MP-1	BRAKE METAL	BRAND: BERRIDGE COLOR: ROYAL BLUE STYLE: LOW SHEEN SMOOTH	METAL ROOF AND CANOPIES a.	
MP-2	BRAKE METAL	BRAND: BERRIDGE COLOR: ZINK GRAY STYLE: LOW SHEEN SMOOTH	METAL COPING AT REAR WALL AND RTU SCREEN WALLS ON ROOF a.	
FRP-1	FRP WALL COVERING	BRAND: NUDO FIBERLITE COLOR: WHITE STYLE: 4' x FULL HEIGHT x .090"	SERVICE AREA AND TOILET a.	
PT-1	PAINT	BRAND: SHERWIN WILLIAMS COLOR: "INDIGO" SW 6531 FINISH: EGGSHELL	CEILING TRIMS AND MISC TRIMS a., c.	
PT-2	PAINT	BRAND: SHERWIN WILLIAMS COLOR: "FIRST STAR" SW 7646 FINISH: SEMI-GLOSS	CEILING, INTERIOR TOILET ROOM WALLS, DOORS, AND FRAMES a., c.	
VB-1	RESILIENT VINYL	BRAND: AMARCO COLOR: LIGHT GRAY FINISH: PROTECT-ALL BASE	SERVICE AREA AND TOILET a.	
VT-1	RESILIENT VINYL FLOORING	BRAND: AMARCO COLOR: LIGHT GRAY FINISH: PROTECT-ALL BASE	SERVICE AREA AND TOILET a.	

FINISH MATERIALS SCHEDULE NOTES:

- SITE CONTRACTOR TO COORDINATE WITH PREFABRICATOR DIRECTLY TO DETERMINE SCOPE SPLIT OF ITEMS PROVIDED/INSTALLED/FINISHED WITHIN FABRICATION FACILITY VERSUS ON-SITE PROVIDE COMPLETE ARCHITECTURAL SIDING SYSTEM AND ACCESSORIES, INCLUDING MATCHING MANUF. FABRICATED CORNERS, FLASHING, AND TRIMS. SIDING INSTALLATION PER MANUF INSTALLATION INSTRUCTIONS.

 PROVIDE A MINIMUM OF TWO (2) COATS PAINT OVER ONE (1) COAT PRIMER ON ALL EXPOSED GYP BD IN SERVICE AREA AND TOILET. PROVIDED COMPLETE NICHIAL SYSTEM AND ACCESSORIES INCLUDING MATCHING MANUF. FABRICATED CORNERS, FLASHING, AND TRIMS INSTALL BER MANUE INSTALL ATION. INSTRUCTIONS
- TRIMS. INSTALL PER MANUF. INSTALLATION INSTRUCTIONS.



2 FIXTURE PLAN
3/8" = 1'-0"

FLOOR FINISH GENERAL NOTES

PROTECT-ALL VINYL FLOORING AND COVE BASE

THROUGHOUT SERVICE AREA AND TOILET - TYP.

FLOOR FINISH KEYNOTES

Number Note Text

ACCESS DOOR FOR CRAWLSPACE 12"x12" FLOOR SINK WITH 3/4 GRATE RE: PLUMBING 12"x60" FLOOR DRAIN AND GRID GRATE RE:

5' - 0"

SERVICE AREA

101

5' - 0"

FLOOR FINISH PLAN

4' - 8"

4' - 8"

5' - 6"

102

PLUMBING

11-14-2025 COPYRIGHT

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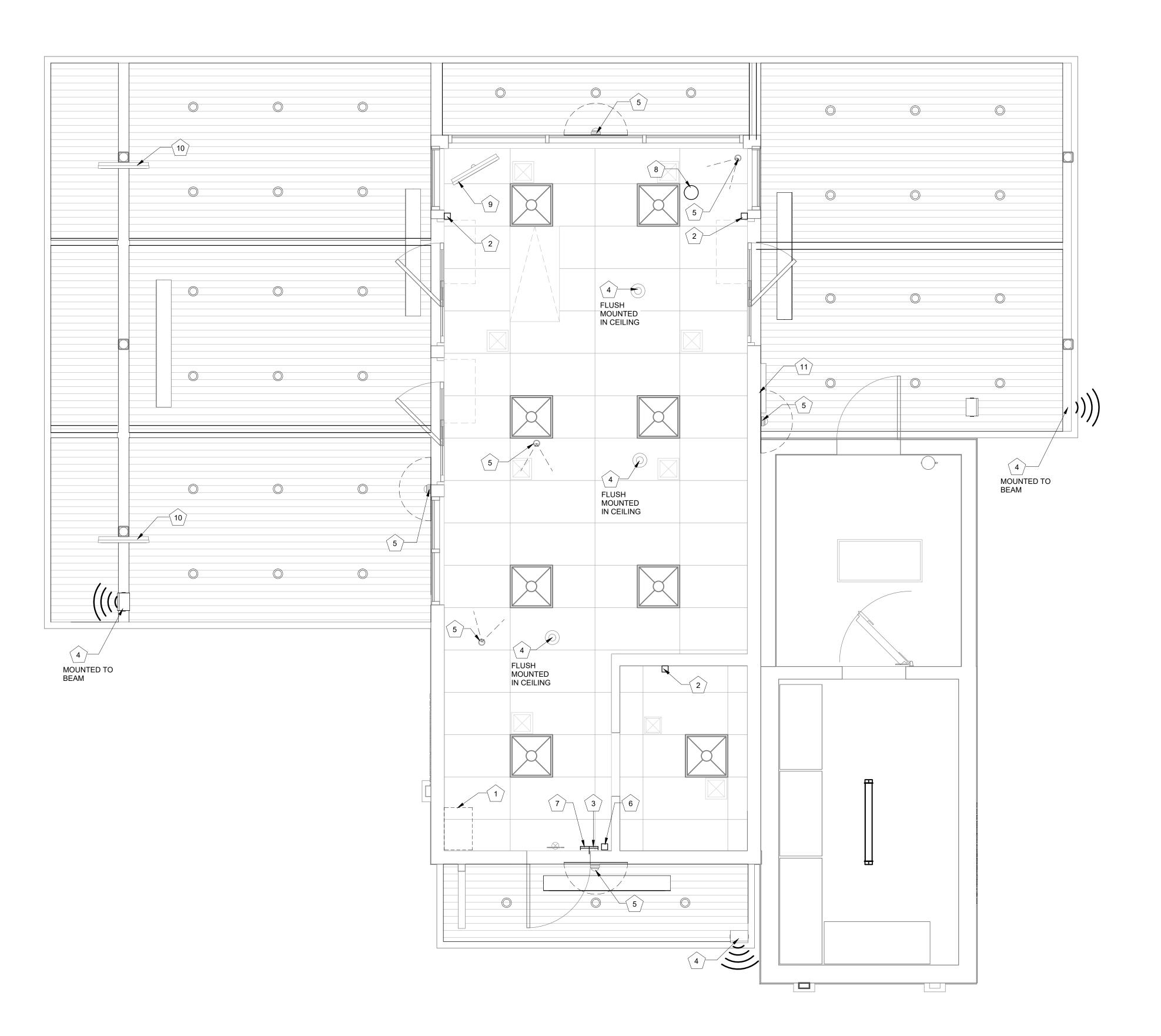
2122 CARLISLE BLVD ALBUQUERQUE, NEW

Issue/Description

FINISH & FIXTURE PLAN

SYSTEM	IS PLAN LEGEND		
Note Number		Note Text	

1	DATA RACK - INSTALLED IN FACTORY - REF DETAIL FOR EQUIPMENT LAYOUT
2	PANIC BUTTON, TYP OF (3) MOUNTED 44" A.F.F INSTALLED IN FIELD BY SECURITY PROVIDER
3	THERMOSTAT - INSTALLED IN FACTORY
4	SPEAKERS - INSTALLED IN FIELD BY IT PROVIDER
5	SECURITY CAMERA - INSTALLED IN FIELD BY SECURITY PROVIDER
6	VOLUME CONTROLLER, MOUNTED UNDER ALARM PANEL - INSTALLED IN FIELD BY IT PROVIDER
7	SECURITY KEY PAD ALARM PANEL- INSTALLED IN FIELD BY SECURITY PROVIDER
8	WIRELESS ACCESS POINT, CEILING MOUNTED - INSTALLED IN FIELD BY IT PROVIDER
9	TV DROP MOUNT FOR SECURITY MONITOR - INSTALLED IN FIELD BY IT PROVIDER
10	SAMSUNG DIGITAL DISPLAYS - TV'S INSTALLED IN FIELD BY IT PROVIDER - CHASE FOR DATA CABLE INSTALLED AT BUILDING MANUFACTURING FACILITY
11	FLUSH MOUNTED LIGHTED SIGN BOX



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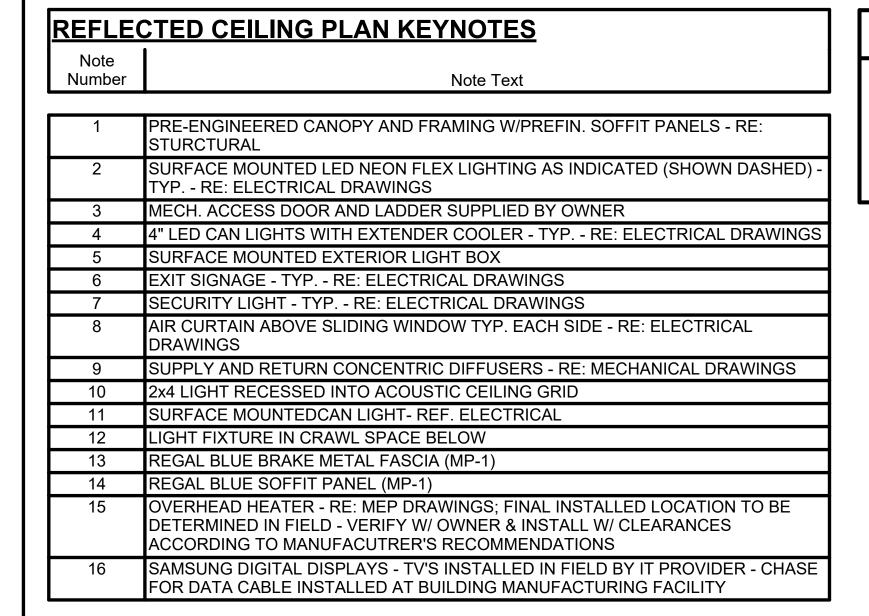
7 BREW DRIVE-THRU (GATEWAY)

# Date 11/10/25	Issue/Description

Project No:	61P000006.30
Drawn By:	VI
Checked By:	KM
Date:	05/16/25

SYSTEMS PLAN

A1.4

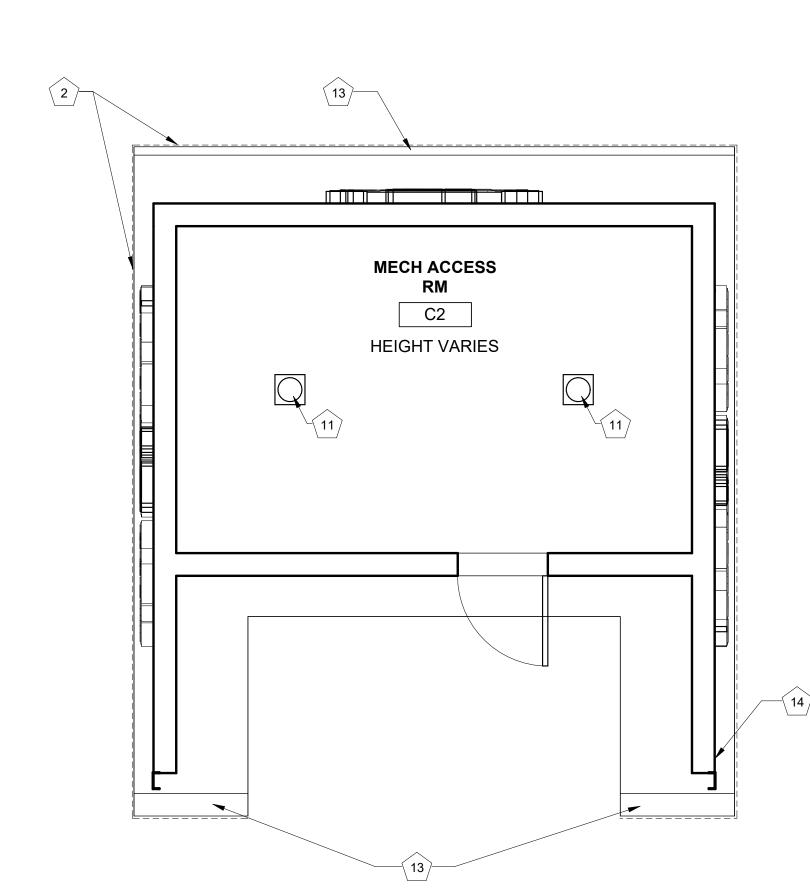


NOTE: LADDER TO COMPLY WITH 2021 IMC SEC. 306.5

- 1. LADDER RUNG SPACING NOT TO EXCEED 14". THE UPPERMOST RUNG SHALL NOT BE GREATER THAN 24" BELOW THE UPPER EDGE OF MECHANICAL ROOM FLOOR
- OF MECHANICAL ROOM FLOOR.
 2. LADDER TOE SPACING MIN. 6" DEEP.
- LADDER TOE SPACING MIN. 6" DEEP.
 MIN. 18 BETWEEN RAILS.
- RUNGS MIN. DIA. 3/4" AND SHALL BE CAPABLE OF WITHSTANDING A 300 LB LOAD.
- 5. LADDER TO BE PROVIDED WITH MIN. 30"x30" CLEAR LANDING.

SPECIFICATION OF PROVIDED LADDER

- MODEL: #AL2511R5LOAD CAPACITY: 375 LBS
- CEILING HEIGHTS: 7'-8" TO 10'-3"
- ROUGH OPENING: 25.5" X 54"
 APPROXIMATE LANDING SPACE AT 10'-3" CEILING HEIGHT: 66"
- APPROXIMATE PROJECT WIDTH: 74"
 APPROXIMATE WEIGHT: 58 5 LPS
- APPROXIMATE WEIGHT: 58.5 LBS.
- THE LADDER AND ROOF HATCH ARE PROVIDED ATTACHED TOGETHER AND SCREWED TO THE OPENING WITH SELF TAPPING SCREWS.



2 RCP - MECH ACCESS ROOM
3/8" = 1'-0"

CEILING FINISH LEGEND

C1

C2

2x4 LAY-IN CEILING TILE.

OPEN TO STRUCTURE ABOVE

GENERAL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF THE LANDLORDS CRITERIA PRIOR TO CONSTRUCTION. FAILURE TO ACCOUNT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE HIM FROM ANY RESPONSIBILITY.
- 2. CONTRACTOR SHALL THOROUGHLY VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION. ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT.



1 REFLECTED CEILING PLAN

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# Date 11/10/25	Issue/Description

 Project No:
 61P000006.30

 Drawn By:
 Vi

 Checked By:
 KM

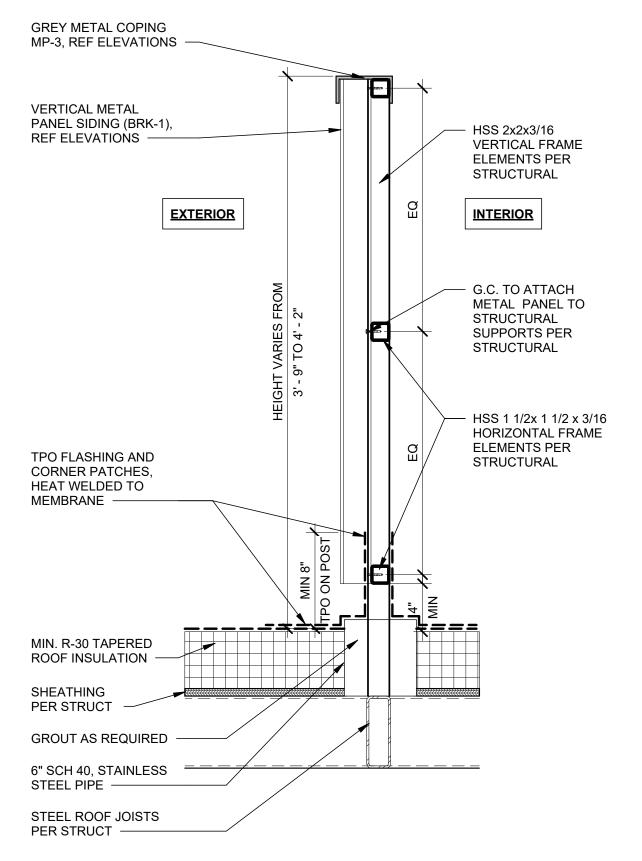
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 11/14/25

REFLECTED CEILING PLAN

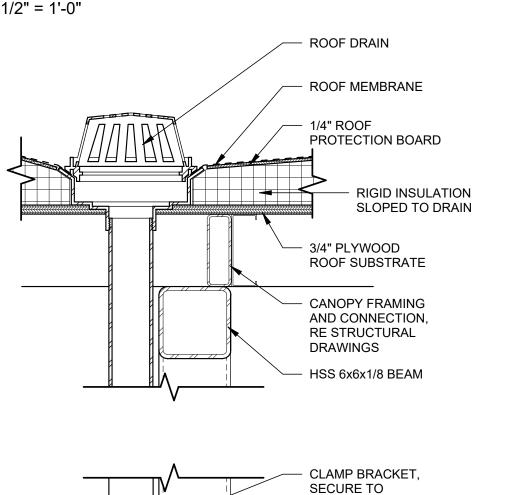
A1.5

ROOF PLAN KEYNOTES Number Note Text

1	DDE ENCINEEDED CANODY AND EDAMING, DE STRUCTURAL DRAWINGS	
<u> </u>	PRE-ENGINEERED CANOPY AND FRAMING - RE: STRUCTURAL DRAWINGS	
2	TPO ROOFING ON ROOF SHEATHING PER STRUCTURAL	
3	CORRUGATED ARC METAL ROOF ON #15 FELT ON PLYWOOD ROOF SHEATHING	
4	TPO ROOFING ON ROOF SHEATHING PER STRUCTURAL ON BUILT-UP 2x CRICKET FRAMING	
5	8" WIDE X 4" HIGH TPO ROOF SCUPPER WITH SHEET METAL UNDERLAYMENT AT REAR WALL	
6	BRAKE METAL CAP; RE: ELEVATIONS	
7	3' - 6" SECURITY METAL RAIL, REF; 3 / A1.6	
8	ROOF DRAIN; DRAIN TO GRADE; RE: CIVIL	
10	ROOF DRAIN; DOWNSPOUT TO BE GALVANIZED, PAINTED, STEEL PIPE. DRAIN TO SITE DRAINAGE & OVERFLOW 2' ABOVE R.D. FL. LINE , DAYLIGHT BELOW SOFFIT; REF CIVIL	
11	OVERFLOW ROOF DRAIN	
12	HVAC EQUIPMENT	
13	ROOFING PER COOLER MANUFACTURER; COORDINATE WITH OWNER	
14	MODULAR BUILDING PICK POINTS WITH ROOFING COLLAR; REF STRUCTURAL	
15	ICE MACHINE CONDENSERS; SITE CONTRACTOR TO DETERMINE FINAL LOCATION	





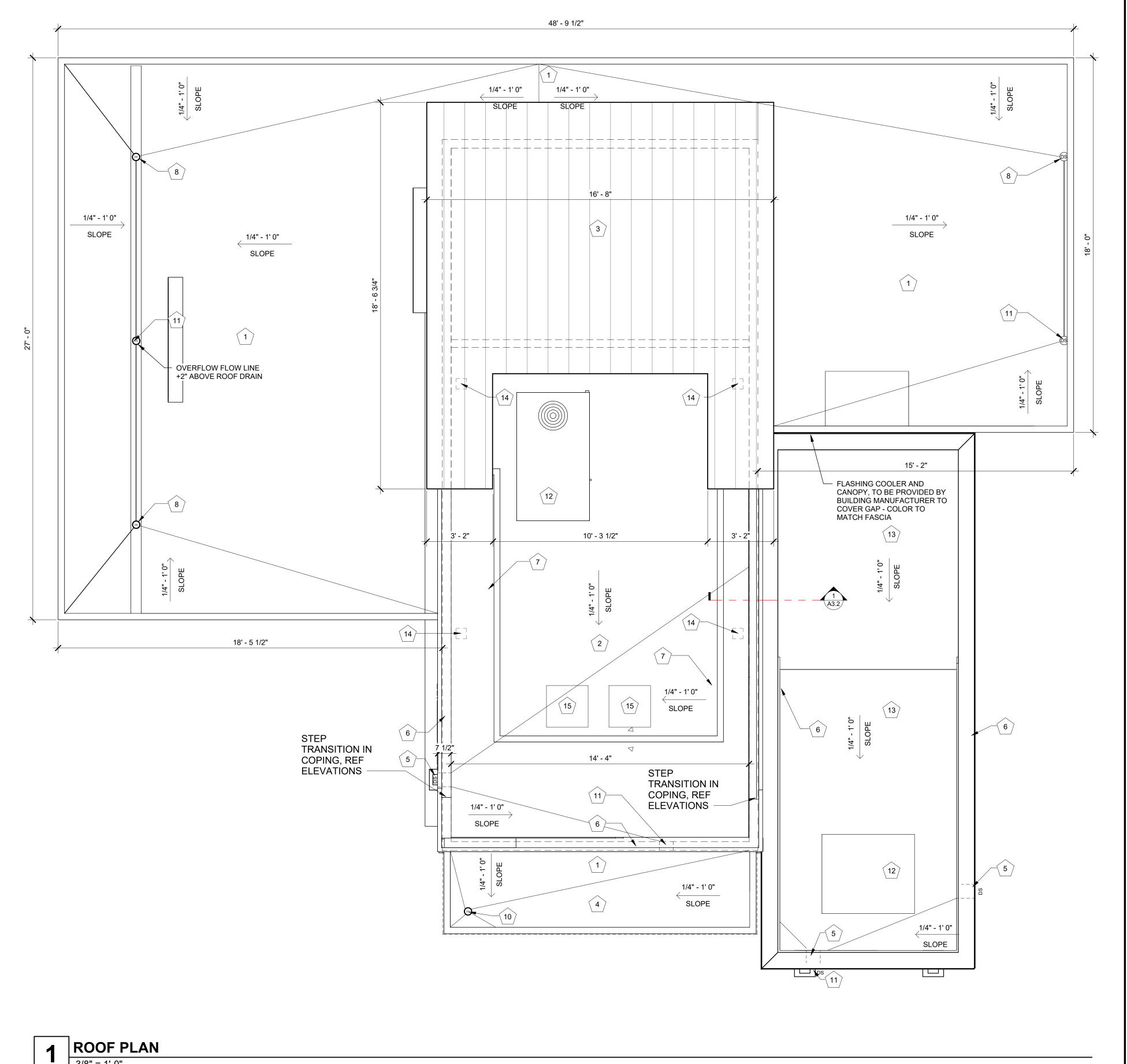


DOWNSPOUT, CENTER

ON COLUMN

CORRUGATED GALVANIZED STEEL DOWNSPOUT, PAINTED TIE TO DRAIN LINE RE: CIVIL

ROOF DRAIN



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2122 CARLISLE BLVD ALBUQUERQUE, NEW N

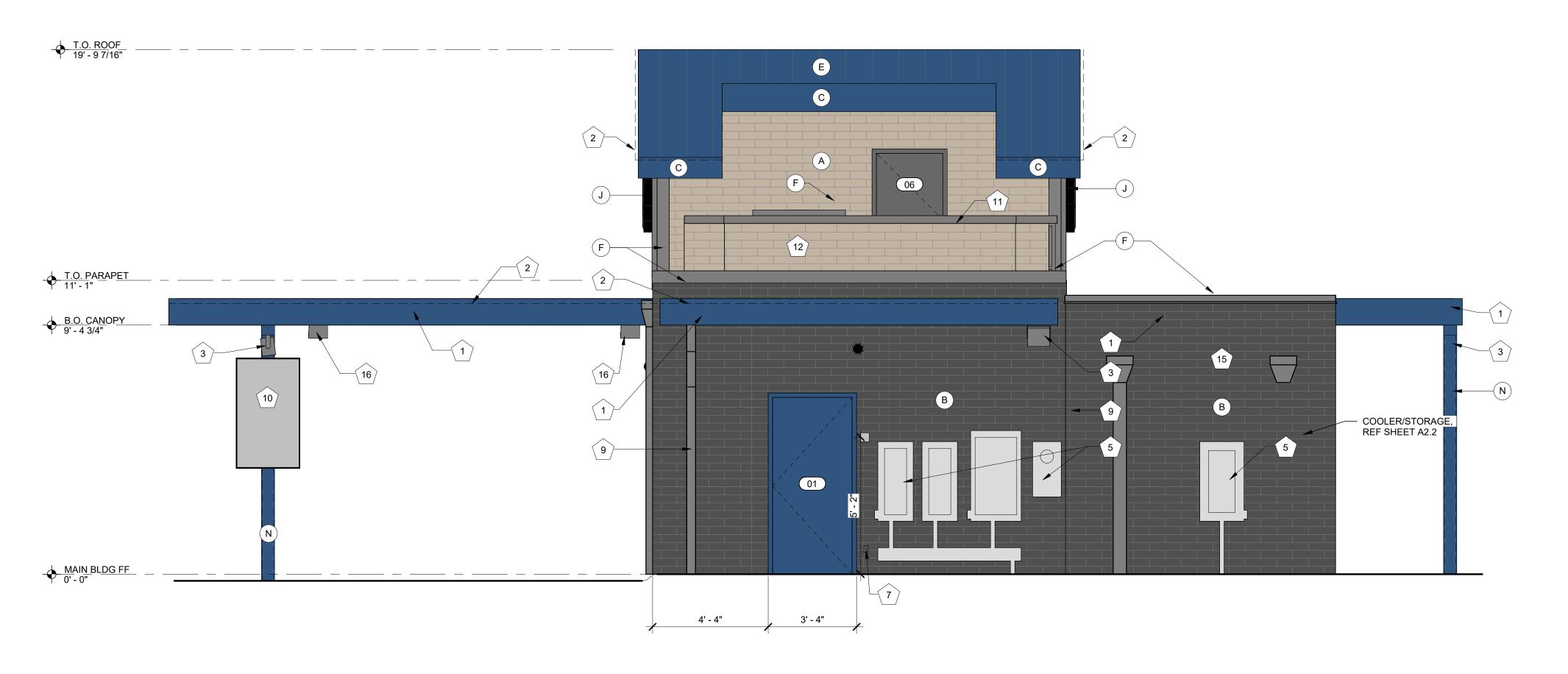
WAY)

DRIVE-THRU

Issue/Description # Date

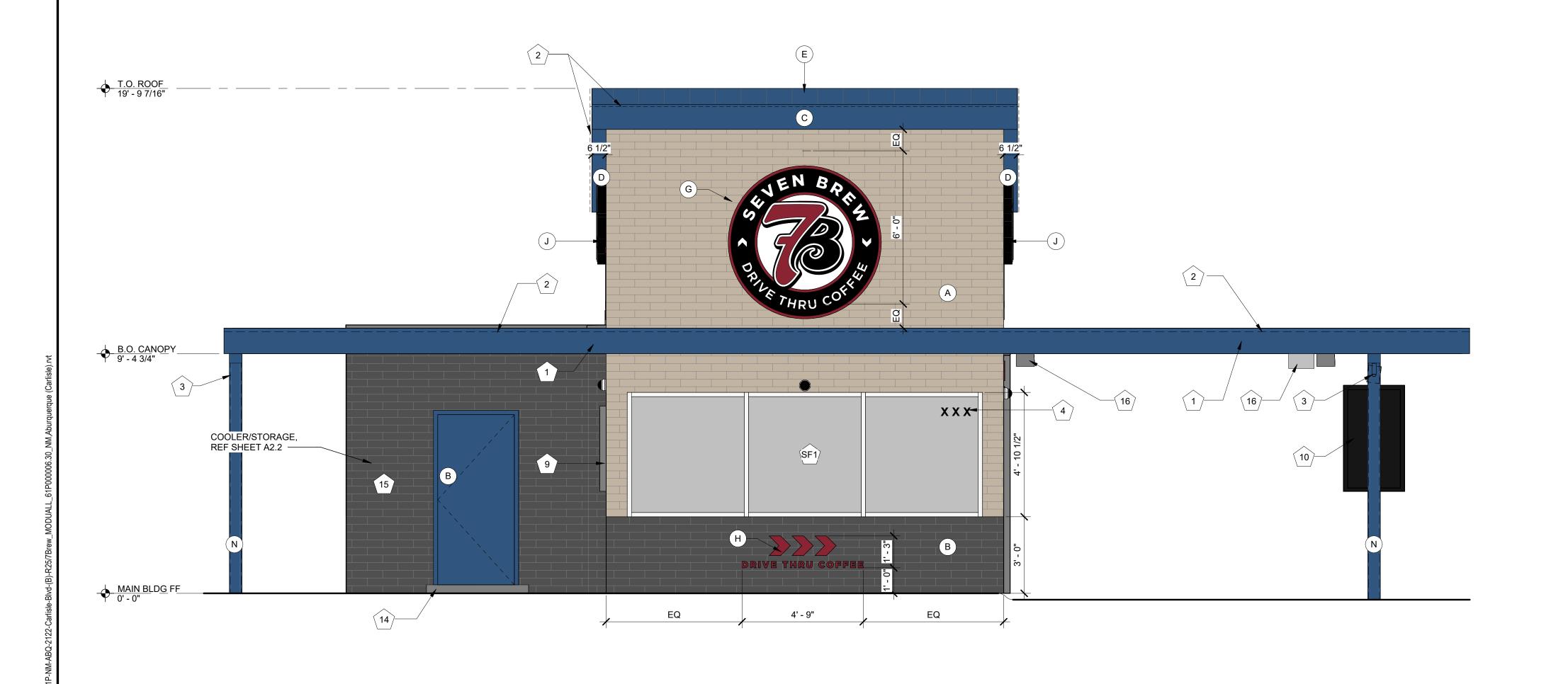
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ROOF PLAN



EXTERIOR ELEVATION - REAR

EXTERIOR ELEVATION - FRONT



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Project No:	61P000006.30
Drawn By:	SAM
Checked By:	KM
Date:	04/04/25

EXTERIOR ELEVATIONS

11/13/2025 9:08:27 AM

EXTERIOR ELEVATION MATERIALS LEGEND Note Number Note Text NICHIHA FIBER CEMENT BRICK SIDING (BRK-2) NICHIHA FIBER CEMENT BRICK SIDING (BRK-1) REGAL BLUE BRAKE METAL FASCIA (MP-1) D REGAL BLUE SOFFIT PANELS (MP-1) REGAL BLUE STANDING SEAM ROOF PANELS (MP-1) METAL BRAKE CAP (MP-2)

Note Text

PRE-ENGINEERED CANOPY BY OTHERS; REF STRUCTURAL DRAWINGS SURFACE MOUNTED LED NEON FLEX LIGHTING AS INDICATED (SHOWN

OUTDOOR SPEAKERS MOUNTED TO CANOPIES - TYP OF (3) REF: SYSTEMS

ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; REF ELECTRICAL

SAMSUNG DIGITAL DISPLAYS - TV'S INSTALLED IN FIELD BY IT PROVIDER -

CHASE FOR DATA CABLE INSTALLED AT BUILDING MANUFACTURING

RUBBERIZED RAMP TO COOLER DOOR LESS THAN 36" RUN LENGTH

OWNER; COORDINATE LOCATION & SPECIFICATIONS WITH CIVIL AND

ADDRESS NUMBERS TO BE 8" TALL x 2" BRUSH STROKE

EXTERIOR WEATHER-PROOF OUTLET; REF ELECTRICAL

EXTERIOR ELEVATION KEYNOTES

DASHED), TYP; REF ELECTRICAL

FACILITY

HVAC EQUIPMENT

STRUCTURAL

SURFACE MOUNTED LIGHTED SIGN BOX

OUTLINE OF MECHANICAL UNIT BEYOND

16 CANOPY HEATER; REF ELECTRICAL DRAWINGS

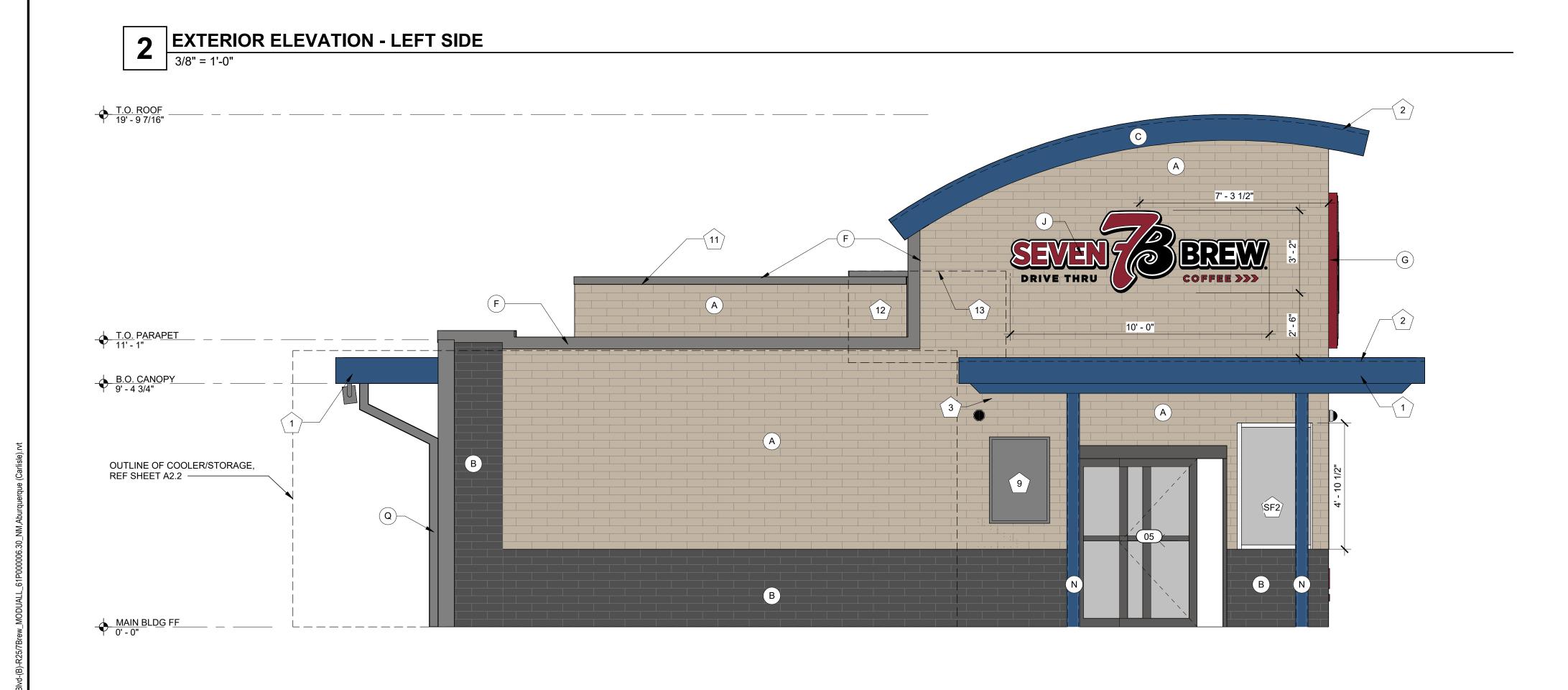
MECHANICAL SREEN WALL, 3' - 6" HT REF 3/A1.6

Number

ROUND STOREFRONT SIGN; SUPPLIED AND INSTALLED BY SIGN CONTRACTOR 1/4" THICK ACRYLIC SIGNAGE APPLIED TO SIDING WITH VH DOUBLE SIDE ILLUMINATED STOREFRONT SIGNAGE BY SIGN CONTRACTOR PAINTED STRUCTURAL CANOPY COLUMN; RAINWATER DOWNSPOUT WITHIN, DOWNSPOUT SCUPPERT GRADE; REF CIVIL

EXPOSED DOWNSPOUT, GALVANIZED, PAINTED; CONNECT TO SUB-GRADE STORM WATER COLLECTION SYSTEM, REF CIVIL





Note		
Number	Note Text	
1	PRE-ENGINEERED CANOPY BY OTHERS; REF STRUCTURAL DRAWINGS	
2	SURFACE MOUNTED LED NEON FLEX LIGHTING AS INDICATED (SHOWN DASHED), TYP; REF ELECTRICAL	
3	OUTDOOR SPEAKERS MOUNTED TO CANOPIES - TYP OF (3) REF: SYSTEMS PLAN	
4	ADDRESS NUMBERS TO BE 8" TALL x 2" BRUSH STROKE	
5	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; REF ELECTRICAL	
7	EXTERIOR WEATHER-PROOF OUTLET; REF ELECTRICAL	
9	SURFACE MOUNTED LIGHTED SIGN BOX	
10	SAMSUNG DIGITAL DISPLAYS - TV'S INSTALLED IN FIELD BY IT PROVIDER - CHASE FOR DATA CABLE INSTALLED AT BUILDING MANUFACTURING FACILITY	
11	MECHANICAL SREEN WALL, 3' - 6" HT REF 3/A1.6	
12	HVAC EQUIPMENT	
13	OUTLINE OF MECHANICAL UNIT BEYOND	
14	RUBBERIZED RAMP TO COOLER DOOR LESS THAN 36" RUN LENGTH	
15	3RD PARTY PREFABRICATED REMOTE WALK-IN COOLER/STORAGE BY OWNER; COORDINATE LOCATION & SPECIFICATIONS WITH CIVIL AND STRUCTURAL	
16	CANOPY HEATER; REF ELECTRICAL DRAWINGS	

Note Number Note Text		
Α	NICHIHA FIBER CEMENT BRICK SIDING (BRK-2)	
В	NICHIHA FIBER CEMENT BRICK SIDING (BRK-1)	
C	REGAL BLUE BRAKE METAL FASCIA (MP-1)	
D	REGAL BLUE SOFFIT PANELS (MP-1)	
E	REGAL BLUE STANDING SEAM ROOF PANELS (MP-1)	
F	METAL BRAKE CAP (MP-2)	
G	ROUND STOREFRONT SIGN; SUPPLIED AND INSTALLED BY SIGN CONTRACTOR	
Н	1/4" THICK ACRYLIC SIGNAGE APPLIED TO SIDING WITH VH DOUBLE SIDE TAPE	
J	ILLUMINATED STOREFRONT SIGNAGE BY SIGN CONTRACTOR	
N	PAINTED STRUCTURAL CANOPY COLUMN; RAINWATER DOWNSPOUT WITHIN, DOWNSPOUT SCUPPERT GRADE; REF CIVIL	
Q	EXPOSED DOWNSPOUT, GALVANIZED, PAINTED; CONNECT TO SUB-GRADE STORM WATER COLLECTION SYSTEM; REF CIVIL	



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2122 CARLISLE BLVD ALBUQUERQUE, NEW MEXICO

# Date 11/10/25	Issue/Description
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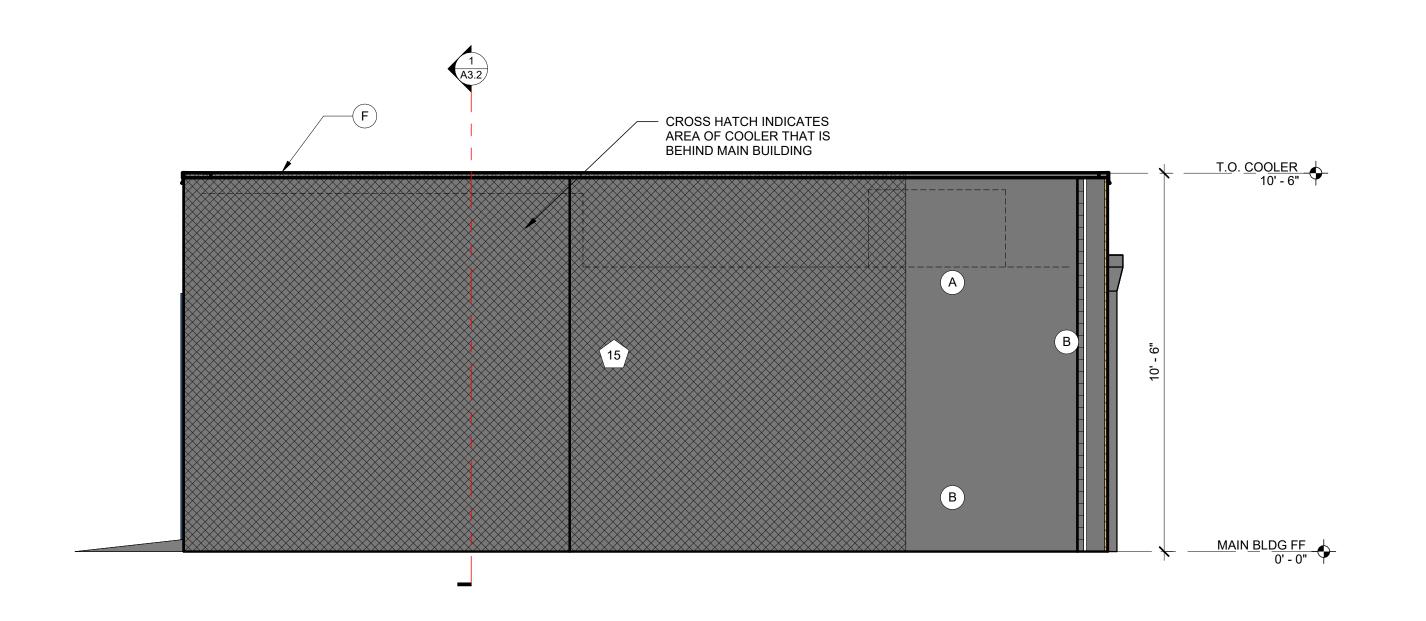
Project No:	61P000006.30
Drawn By:	VI
Checked By:	KM
Date:	05/16/25

EXTERIOR ELEVATIONS

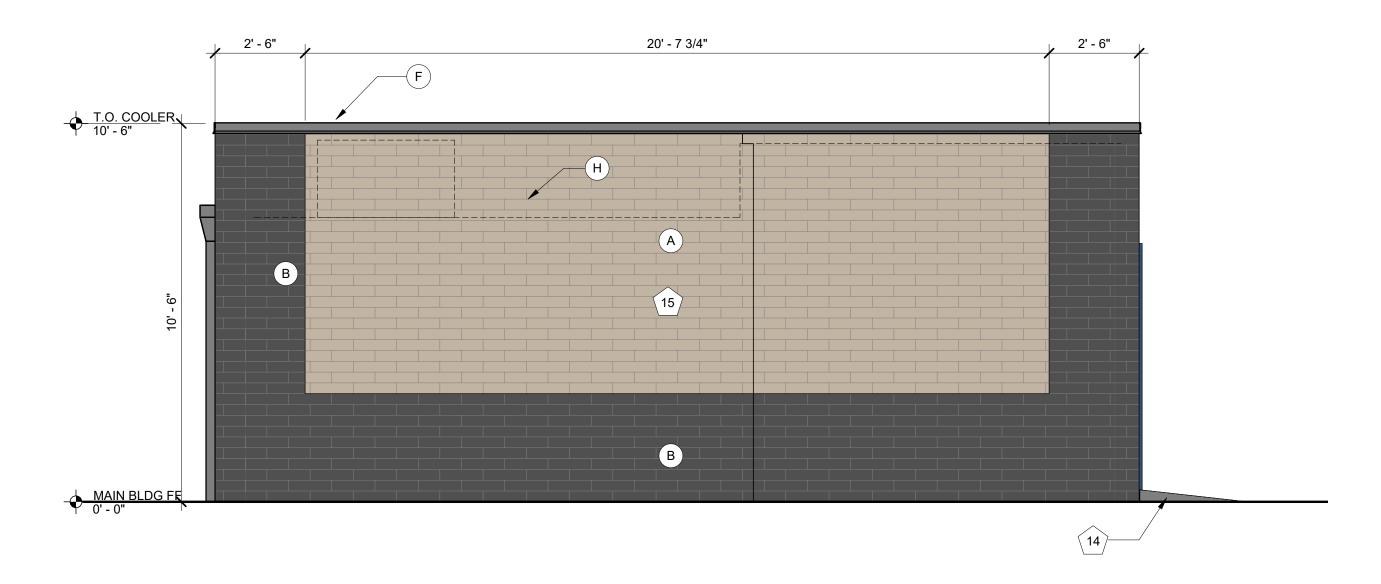
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EXTERIOR ELEVATION - RIGHT SIDE

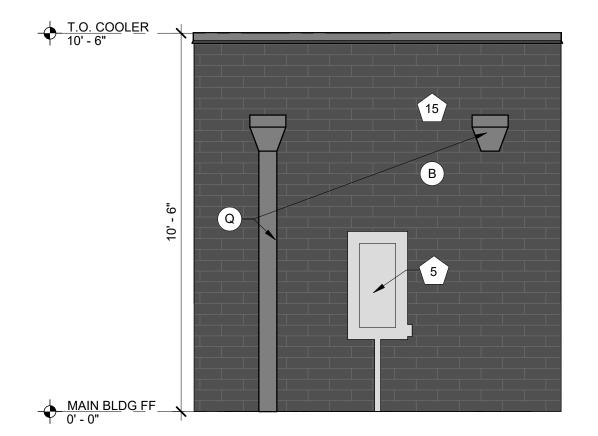
3/8" = 1'-0"

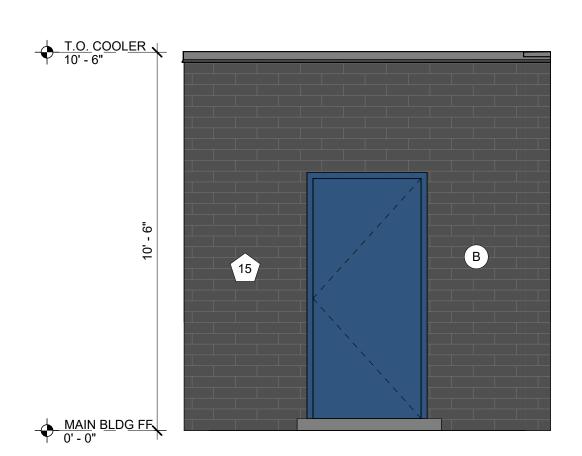


EXTEIOR ELEVATION - COOLER EAST



3 EXTERIOR ELEVATION - COOLER WEST





COOLER ELEVATION - REAR
3/8" = 1'-0"

COOLER ELEVATION - FRONT
3/8" = 1'-0"

EXTERIOR ELEVATION KEYNOTES Note Number Note Text

1	PRE-ENGINEERED CANOPY BY OTHERS; REF STRUCTURAL DRAWINGS	
2	SURFACE MOUNTED LED NEON FLEX LIGHTING AS INDICATED (SHOWN DASHED), TYP; REF ELECTRICAL	
3	OUTDOOR SPEAKERS MOUNTED TO CANOPIES - TYP OF (3) REF: SYSTEM PLAN	
4	ADDRESS NUMBERS TO BE 8" TALL x 2" BRUSH STROKE	
5	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; REF ELECTRICA	
7	EXTERIOR WEATHER-PROOF OUTLET; REF ELECTRICAL	
9	SURFACE MOUNTED LIGHTED SIGN BOX	
10	SAMSUNG DIGITAL DISPLAYS - TV'S INSTALLED IN FIELD BY IT PROVIDER CHASE FOR DATA CABLE INSTALLED AT BUILDING MANUFACTURING FACILITY	
11	MECHANICAL SREEN WALL, 3' - 6" HT REF 3/A1.6	
12	HVAC EQUIPMENT	
13	OUTLINE OF MECHANICAL UNIT BEYOND	
14	RUBBERIZED RAMP TO COOLER DOOR LESS THAN 36" RUN LENGTH	
15	3RD PARTY PREFABRICATED REMOTE WALK-IN COOLER/STORAGE BY OWNER; COORDINATE LOCATION & SPECIFICATIONS WITH CIVIL AND STRUCTURAL	
16	CANOPY HEATER; REF ELECTRICAL DRAWINGS	

Note Number	Note Text	
A	NICHIHA FIBER CEMENT BRICK SIDING (BRK-2)	
В	NICHIHA FIBER CEMENT BRICK SIDING (BRK-1)	
С	REGAL BLUE BRAKE METAL FASCIA (MP-1)	
D	REGAL BLUE SOFFIT PANELS (MP-1)	
Е	REGAL BLUE STANDING SEAM ROOF PANELS (MP-1)	
F	METAL BRAKE CAP (MP-2)	
G	ROUND STOREFRONT SIGN; SUPPLIED AND INSTALLED BY SIGN CONTRACTOR	
Н	1/4" THICK ACRYLIC SIGNAGE APPLIED TO SIDING WITH VH DOUBLE SIDE TAPE	
J	ILLUMINATED STOREFRONT SIGNAGE BY SIGN CONTRACTOR	
N	PAINTED STRUCTURAL CANOPY COLUMN; RAINWATER DOWNSPOUT WITHIN, DOWNSPOUT SCUPPERT GRADE; REF CIVIL	
Q	EXPOSED DOWNSPOUT, GALVANIZED, PAINTED; CONNECT TO SUB-GRAD STORM WATER COLLECTION SYSTEM; REF CIVIL	

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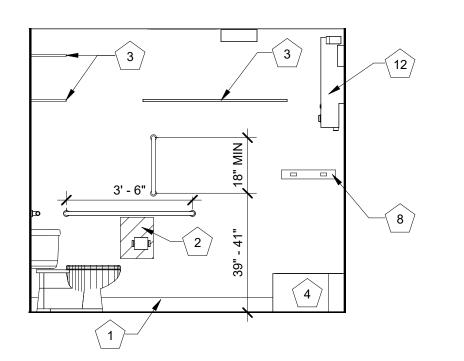
#	Date 11/10/25	Issue/Description
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Project No:	61P000006.30
Drawn By:	VI
Checked By:	KM
Date:	05/16/25

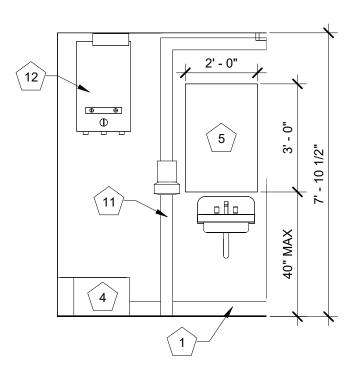
EXTERIOR ELEVATIONS - COOLER

A2.2

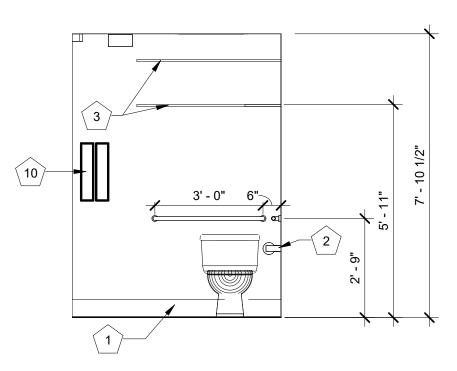
SIDE ELEVATION AT LAVATORY



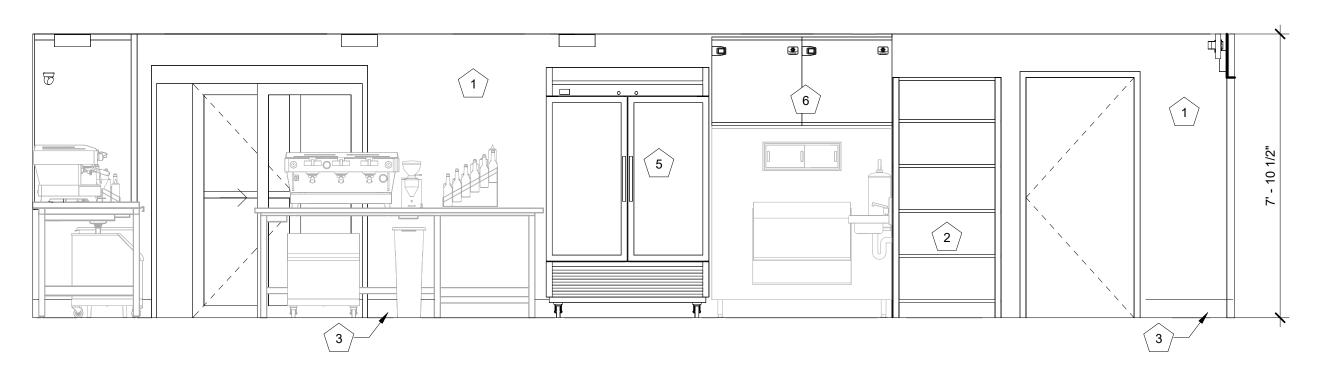
SIDE ELEVATION AT TOILET



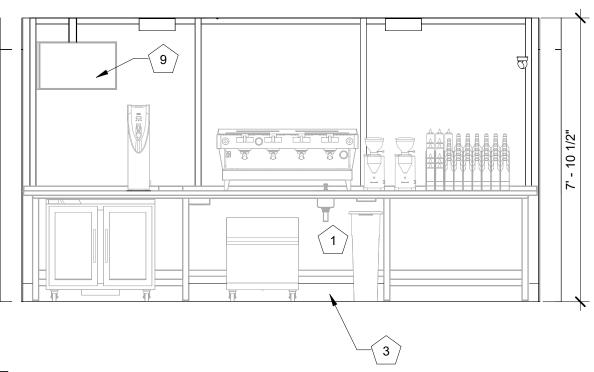
FRONT ELEVATION AT TOILET



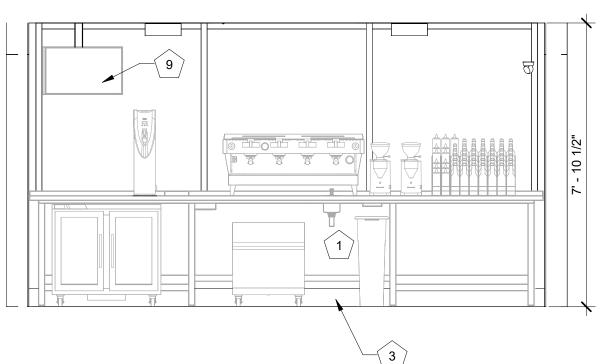
FRONT ELEVATION AT LAVATORY



3/8" = 1'-0" LOOKING AT RESTROOM DOOR



INTERIOR ELEVATION 3/8" = 1'-0" LOOKING AT MAIN COUNTER



INTERIOR ELEVATION 3/8" = 1'-0" LOOKING AT BACK DOOR **TOILET ELEVATION GENERAL NOTES**

- ALL WALLS TO BE 5/8" TYPE 'WRX' GYP.BD (PT-2) WITH 48" (MIN.) FRP WAINSCOT AND 1/4" PROTECT-ALL RUBBER BASE (VB-1).
- GRAB BAR AND ANY OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE MIN. RADIUS OF 1/8" - 1 1/2" DIA.
- TOILET PAPER HOLDER MUST BE WITHIN HATCHED AREA

Note Text

INDICATED IN 6/A3.2. PROVIDE PROTECTIVE COVER TO EXPOSED PIPES - RE: PLUMBING DRAWINGS.

TOILET ELEVATION KEYNOTES

GRAB BAR.

Note Number

1	ROLL-OUT TYPE WATERPROOF MEMBRANE AT
	TOILET - RETURN MEMBRANE UP WALL MIN 6"
2	(T-1) TOILET PAPER HOLDER
3	STAINLESS STEEL SHELVING
4	MOP SINK
5	1/4" CLEAR MIRROR
6	(T-2) PAPER TOWEL HOLDER MOUNTED AT 42" A.F.F.
7	2x WOOD BLOCKING BEHIND LAVATORY AS INDICATED FOR ADDITIONAL SUPPORT
8	BROOM AND MOP HOLDER
9	WATER HEATER
10	RPZ VALVES
11	WATER FILTERS
12	ELECTRIC WATER HEATER: RE ELECTRICAL & PLUMBING

INTERIOR ELEVATION KEYNOTES

Note Number	Note Text
1	FRP WALL PANELS (FRP-1) ON 5/8" TYPE 'X' GYP BD SUBSTRATE
2	STAINLESS STEEL STORAGE SHELVING
3	PROTECT-ALL RUBBER BASE (VB-1) - TYP
4	NEW MULTI PURPOSE DRY CHEMICAL (2A:10BC) FIRE EXTINGUISHER (PER NFPA 10)
5	REACH IN MERCHANDISER
6	MANITOWOC ICE BIN
7	12U DATA RACK
8	EPOXY COATED WIRE SHELVING - 48" X 12"- TYP OF (2)
9	32" SECURITY DISPLAY

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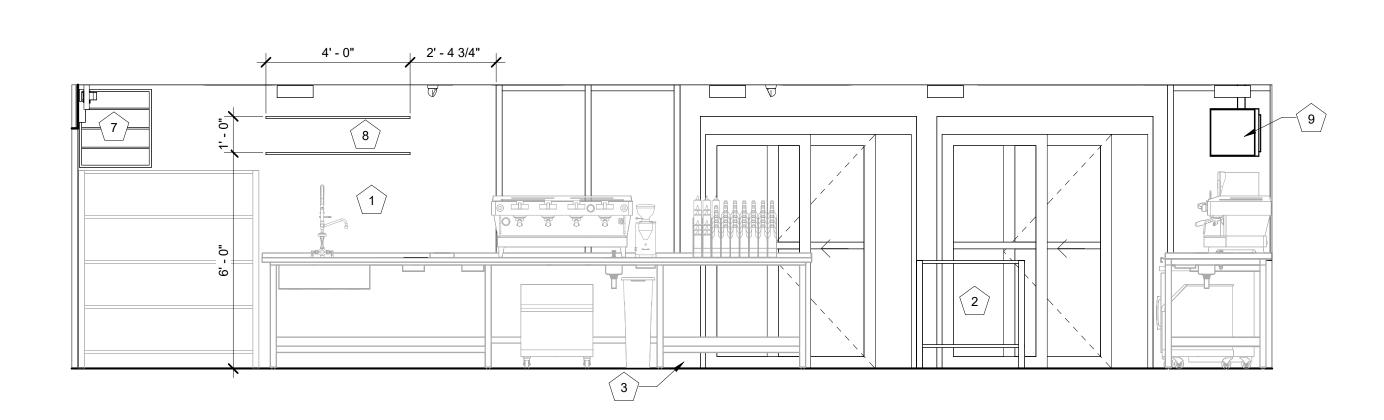
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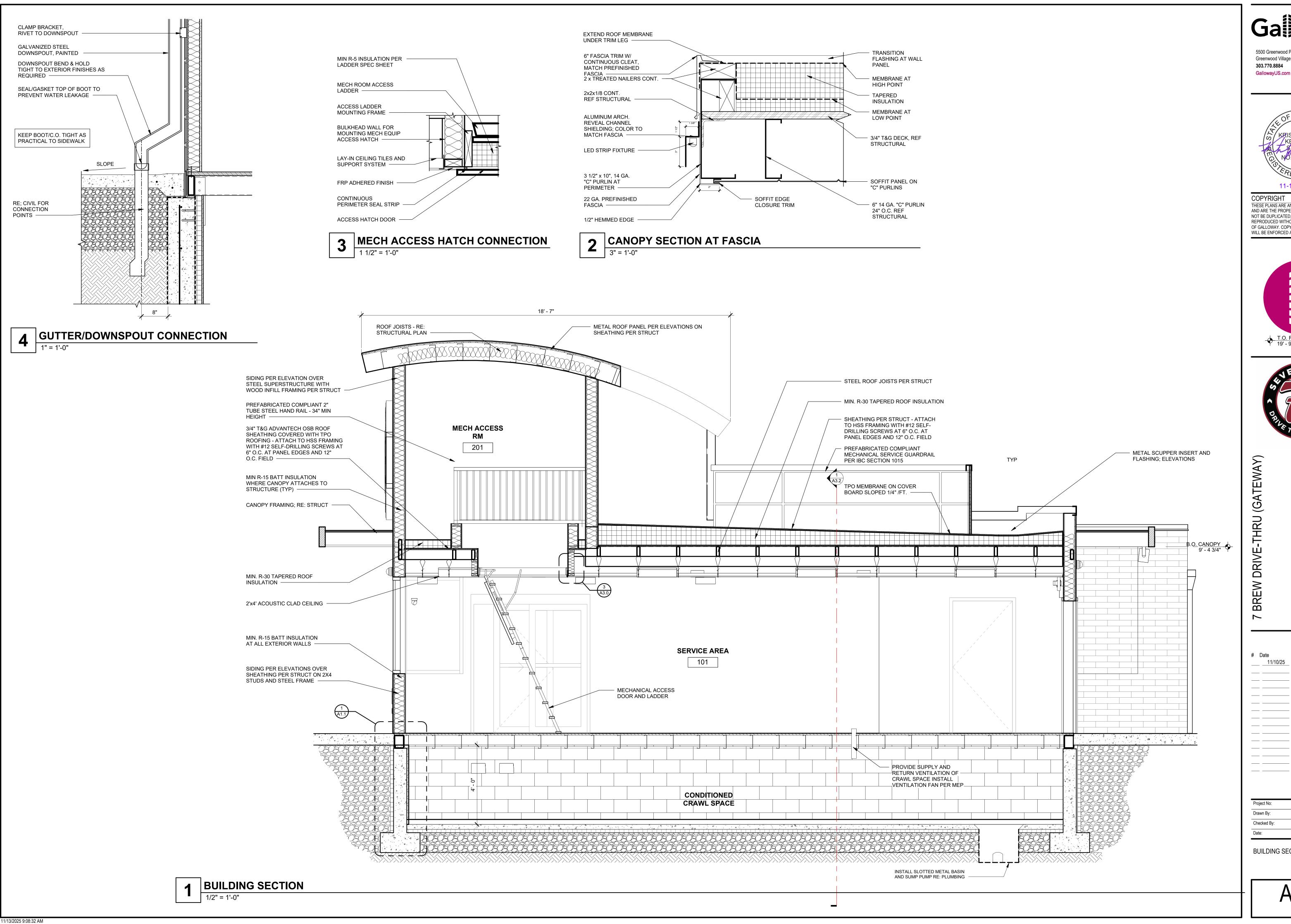




INTERIOR ELEVATIONS



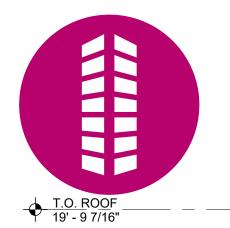
INTERIOR ELEVATION 3/8" = 1'-0" LOOKING AT STORAGE RACKS



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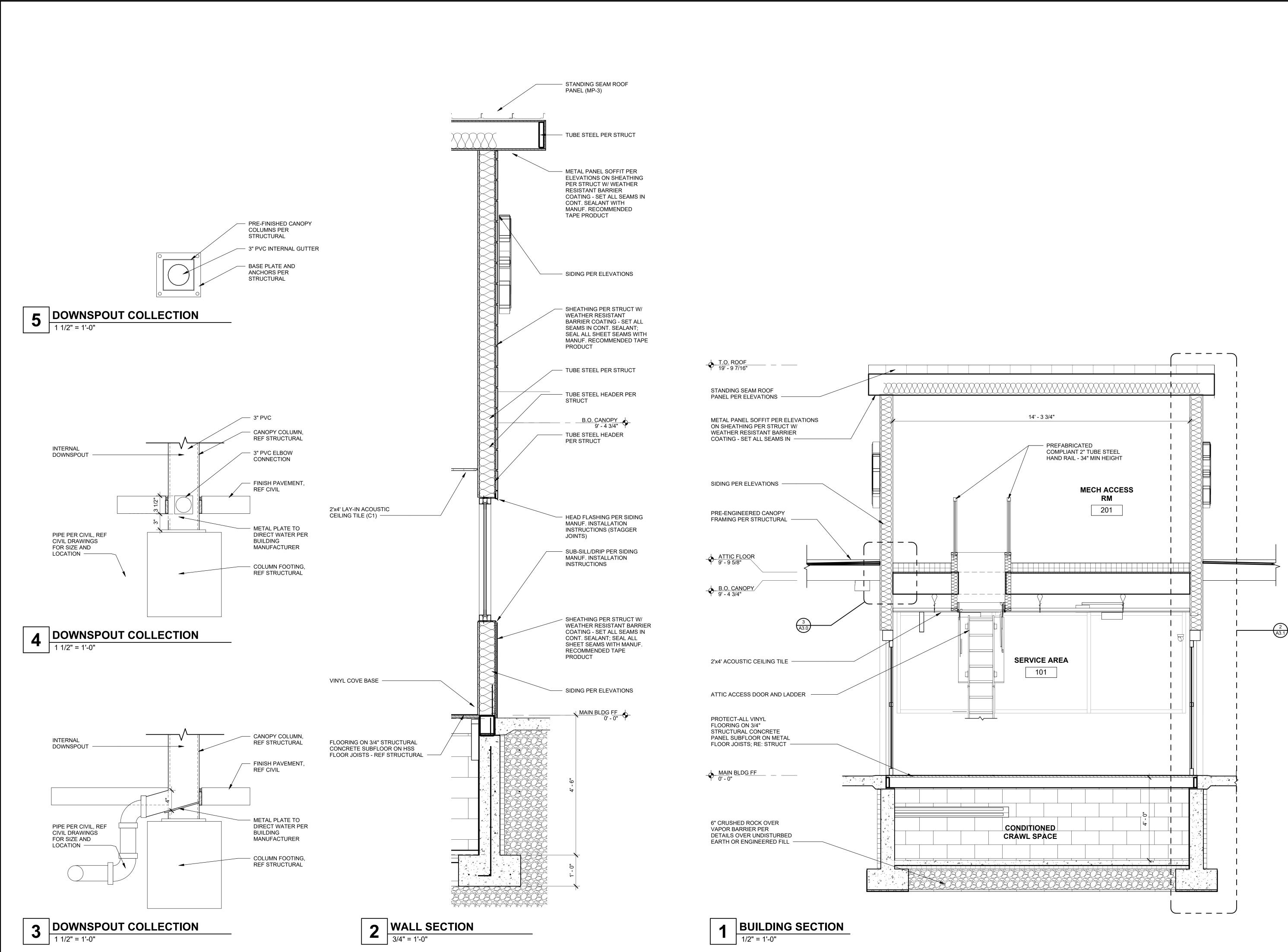


2122 CARLISLE BLVD ALBUQUERQUE, NEW

Issue/Description

Checked By:

BUILDING SECTION



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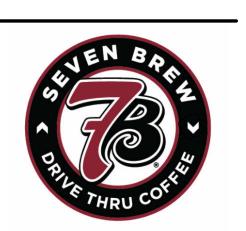
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REW DRIVE-THRU (GATEWAY

2122 CARLISLE BLVD ALBUQUERQUE, NEW

 Project No:
 61P000006.30

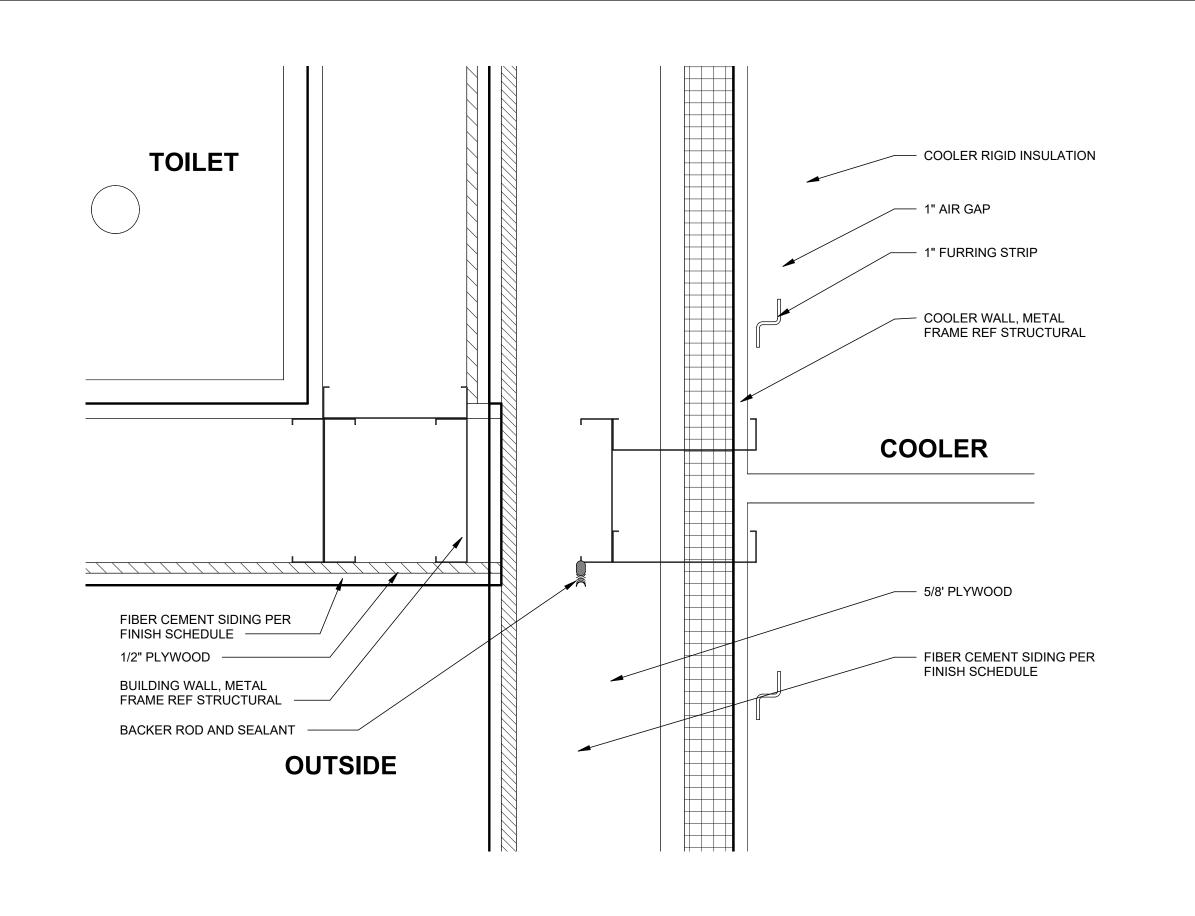
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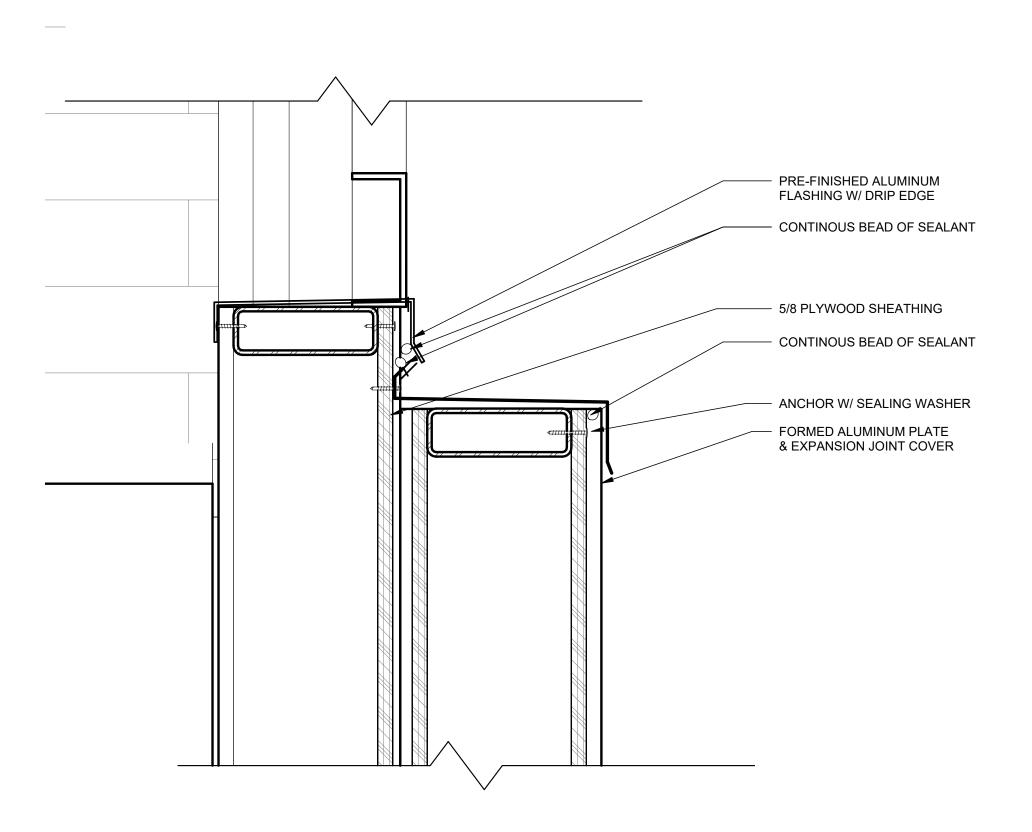
 Checked By:
 KM

 Date:
 05/16/25

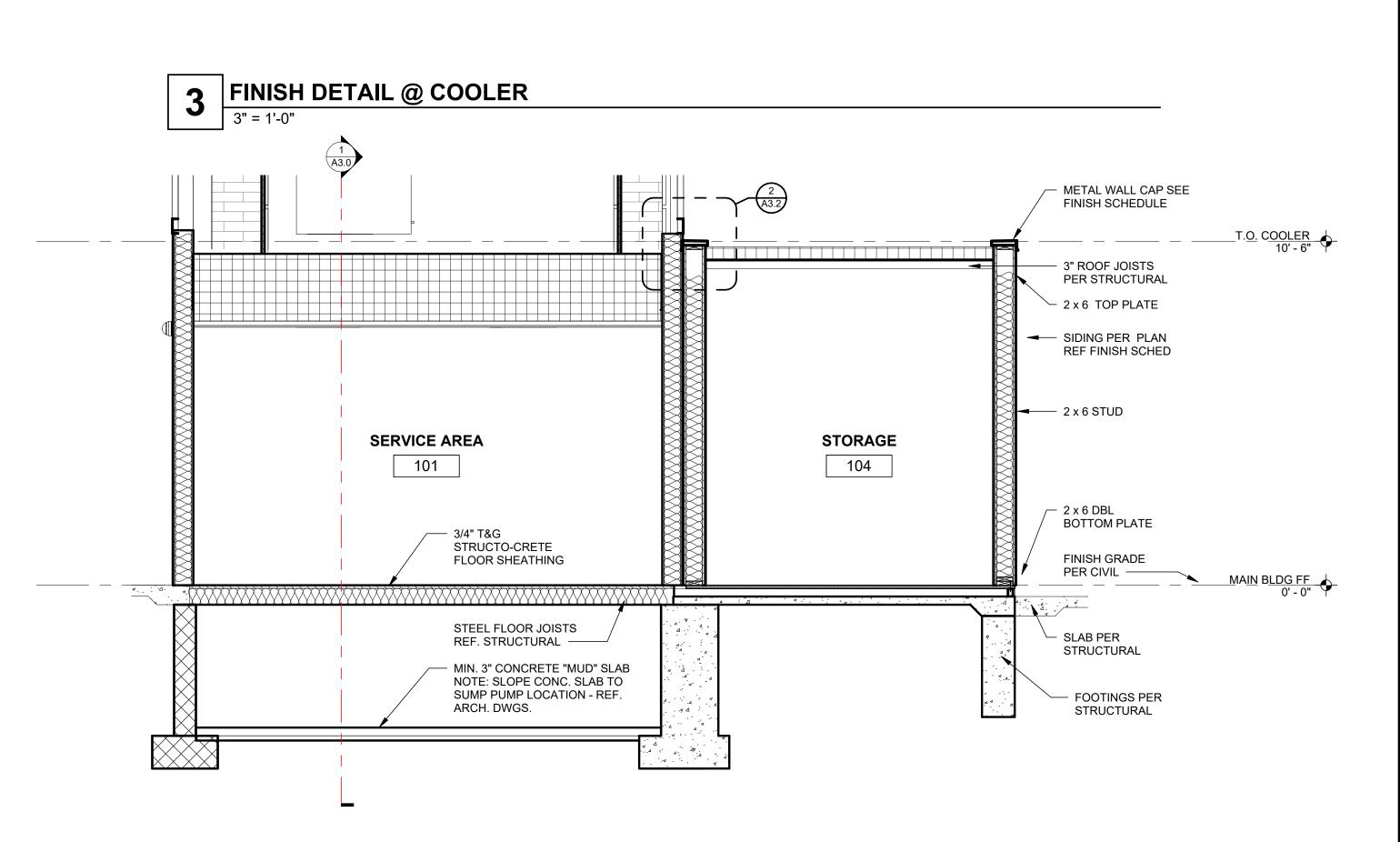
BUILDING SECTION

A3.1





2 COOLER WALL CONNECTION
3" = 1'-0"



COOLER SECTION

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2122 CARLISLE BLVD ALBUQUERQUE, NEW MEXICO

# Date	Issue/Description

Project No:	61P000006.30
Drawn By:	Author
Checked By:	Checker
Date:	11/05/25

BUILDING SECTIONS

A3.2

01	3' - 0"	6' - 8"	1 3/4"	Α	HM	Α	HM	4/A4.0	4/A4.0 SIM	2/A4.0	a,b,c.
02	3' - 0"	6' - 8"	1 3/4"	В	HM	В	HM	3/A4.0	5/A4.0	N.A.	a,b,c.
03	6' - 0"	6' - 8"	2"	С	AL	С	AL	6/A4.0	6/A4.0 SIM	2/A4.0 SIM	a, d.
04	6' - 0"	6' - 8"	2"	С	AL	С	AL	6/A4.0	6/A4.0 SIM	2/A4.0 SIM	a, d.
05	6' - 0"	6' - 8"	2"	С	AL	С	AL	6/A4.0	6/A4.0 SIM	2/A4.0 SIM	a, d.
06	2' - 6"	5' - 0"	1 3/4"	D	HM	D	HM	4/A4.0	6/A4.0 SIM	1/A4.0	a,b,c.

ı				•
ı	Mark	Туре	Description	Finish

01	EXTERIOR PASSAGE	1 1/2" Pr 4 1/2" BB Hinges - NRP; Wallstop and Weatherstripping / Rain Drip at Exterior Doors; Self Closer; Detex ECL - 600 Panic Hardware	
02	INTERIOR PASSAGE	1 1/2" Pr 4 1/2" BB Hinges - NRP	BRUSHED SS
03	SLIDING DOOR	Manufacturer's Standard Operating Hardware	PRE FIN
04	SLIDING DOOR	Manufacturer's Standard Operating Hardware	PRE FIN
05	SLIDING DOOR	Manufacturer's Standard Operating Hardware	PRE FIN
06	EXTERIOR PASSAGE	1 1/2" Pr 4 1/2" BB Hinges - NRP; Wallstop and Weatherstripping / Rain Drip at Exterior Door	BRUSHED SS

HARDWARE TYPES MANUFACTURER DESCRIPTION APPROVED

HINGES	Stanley #CB0700	YES
LOCKSET	Schlage	YES
WEATHERSTRIP	Pennco Zero or Approved Equal	YES

3' - 2"

DOOR HARDWARE SCHEDULE GENERAL NOTES:

- 1. THRESHOLD HEIGHTS SHALL BE NO GREATER THAN 1/2". 2. RAISED THRESHOLD AND LEVEL CHANGES SHALL BE BEVELED WITH
- A SLOPE NO GREATER THAN 1:2. 3. DOOR HARDWARE SHALL BE APPROVED LEVERS OR PUSH/PULL
- HANDLES. 4. NO ELECTRONIC LOCKING SYSTEM SHALL BE INSTALLED OR OPERATED WITHOUT THE PRIOR APPROVAL OF THE FIRE
- 5. REFER TO DOOR ELEVATIONS FOR ADDITIONAL HARDWARE REQUIREMENTS

PREVENTION BUREAU.

DOOR SCHEDULE NOTES:

NOTES

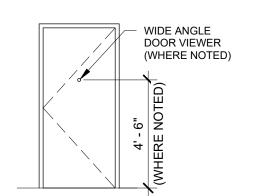
- a. REFER TO DOOR ELEVATIONS FOR SPECIFICATIONS.
- b. PAINT TO MATCH ADJACENT FINISHES. c. REFER TO CODE COMPLIANCE DOOR NOTES (THIS SHEET) FOR ADDITIONAL REQUIREMENTS.
- d. 6' 0" TORMAX TX9200SL SLIDING DOORS W/ M.S TWO POINT LOCK
- CYLINDERS AND 1870 FLUSH BOLT CYLINDERS

CODE COMPLIANCE DOOR NOTES:

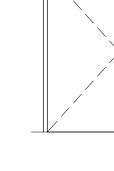
ALL EXIT DOORS SHALL CONFORM TO THE FOLLOWING PROVISIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE ADOPTED ACCESSIBILITY CODE FOR THE STATE OF CONNECTICUT (2010 ADA)

- 1. THE EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF
- ANY SPECIAL KNOWLEDGE OR EFFORT WHEN THE BUILDING IS OCCUPIED. 2. ALL HAND-ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 34" TO 48" A.F.F. AND SHALL BE OPERATED WITH A SINGLE EFFORT BY LEVER TYPE
- 3. DOOR LEADING TO UNISEX TOILET ROOM SHALL BE IDENTIFIED WITH A 12" DIAMETER CIRCLE WITH A TRIANGLE SUPERIMPOSED ON THE CIRCLE AND WITHIN THE 12" DIAMETER. SIGN/SYMBOL SHALL BE MOUNTED ON THE WALL, ON THE LATCH SIDE OF THE DOOR AND 60" A.F.F. AND NO MORE THAN 8" FROM THE EDGE OF THE DOOR TO THE EDGE OF THE SIGN.

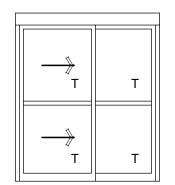
DOOR ELEVATIONS



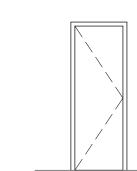
3068 HM - 16 GA. INSULATED HOLLOW METAL FRAME, (BRUSHED ALUMINUM FINISH) CLOSER, AND SEAL - PROVIDE 'DETEX' ECL-600 (OR EQUAL) PANIC HARDWARE - 1 1/2 PAIR STANLEY #CB0700 TWO KNUCKLE HINGES -STANLEY #803969 (OR EQUAL) STEEL-BRIGHT BRASS, 170 DEGREE, WIDE ANGLE DOOR VIEWER



3068 HM - 16 GA. INSULATED (PAINTED) WITH HOLLOW METAL FRAME (PAINTED) WITH CLOSER - PROVIDE SCHLAGE PRIVACY LOCK WITH 'SATURN'



6' - 0" TORMAX MANUAL SIDING DOOR -PROSLIDE SERIES TX9200SL PG TSS DOOR SYSTEM OR APPROVED EQUAL. SLIDING DOOR GLAZING: ALL GLAZING TO BE CLEAR 1" T. INSULATED (LOW E3 - ARGON) TEMPERED GLASS



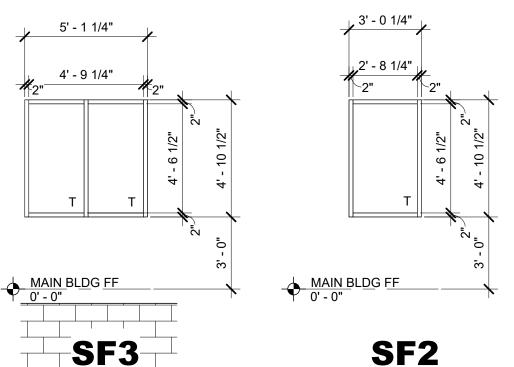
LEVER HANDLE (BRUSHED

ALUM.) 1 1/2 PAIR BUTT HINGES

2560 HM - 16 GA. INSULATED HOLLOW METAL DOOR (PAINTED) WITH METAL FRAME (PAINTED) AND SEALS - 1 1/2 PAIR STANLEY #CB0700 TWO KNUCKLE HINGES

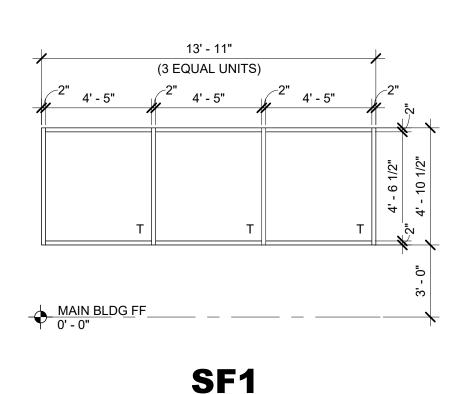
WINDOW ELEVATIONS

ALUMINUM STOREFRONT





ALUMINUM STOREFRONT



ALUMINUM STOREFRONT

INTERIOR

3/4" PLYWOOD FLOOR DECK OVER WOOD

AND STEEL FLOOR JOISTS; SEE STRUCT

WINDOW ELEVATION GENERAL NOTES

EXTERIOR

- VERIFY ALL ROUGH OPENING PRIOR TO ORDERING WINDOWS. PROVIDE BACKER ROD & SEALANT AROUND ALL OPENINGS. FOLLOW MANUFACTURE SPECIFICATIONS FOR PROPER OF THE PROPER SECURITY OF THE PROPER SECURITY OF THE PROPER SECURITY OF T
- STOREFRONT INSTALLATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES AT VARIANCE WITH
- (LOW E3 ARGON) IN 2" x 4" 1/2 ALUMINUM KAWNEER TRIFAB VERSAGLAZE 451 FRAMING SYSTEM.

DOOR; SEE SCHEDULE PEMKO 158A-96 THRESHOLD FULL BED SEALANT UNDER THRESHOLD GALV BRAKE METAL FLASHING EXTENDS UP & UNDER THRESHOLD 5/8" PLYWOOD FULL WIDTH OF ROOF FOR FLASHING ONLY - 3/4" PLYWOOD **FULLY ADHERED** MEMBRANE ROOFING OVER 1/2" PLYWOOD (ONLY THE WIDTH OF THE STEP; SEE FLOOR PLAN) 3/4" CDX ROOF SHEATHING

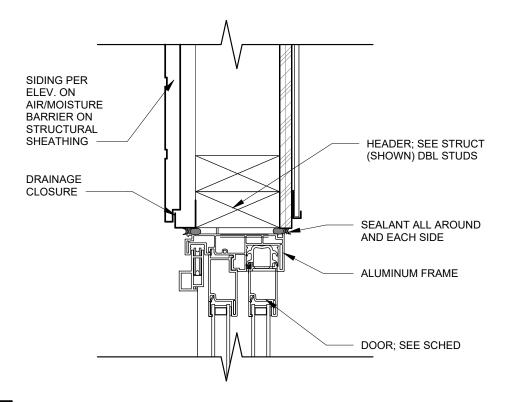
WOOD BLOCKING AND KNEE WALL; INFILL WITH INSULATION

DOOR THRESHOLD @ MECH ACCESS RM DOOR

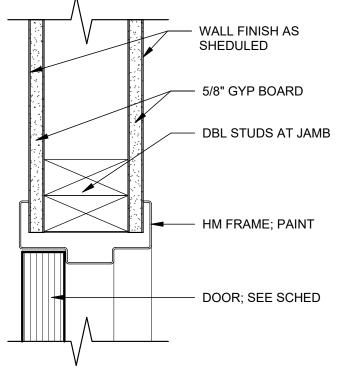
— FLUSH DROP HANDLE 316 STAINLESS STEEL HINGES WITH TAMPER PADLOCK PROOF BOLTS STAINLESS STEEL AUTOMATIC HOLD EXTRUDED ANGLE OPEN ARM SEAT & CONTINUOUS ANCHOR FLANGE

CRAWL SPACE ACCESS DOOR

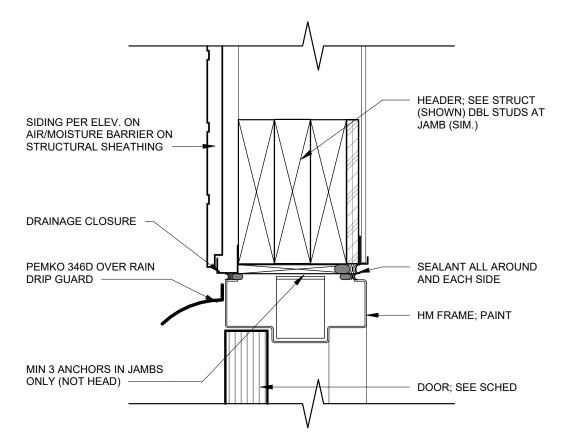
3' - 2"



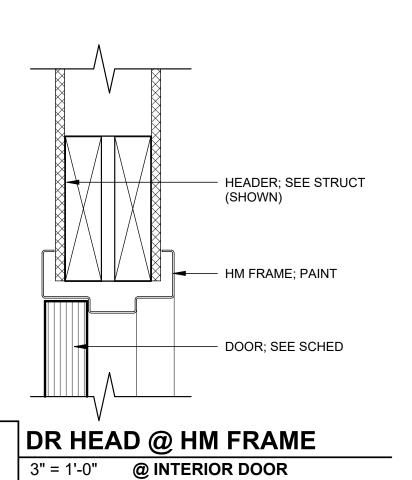
DR HEAD @ 2x 6 SLIDING DOOR

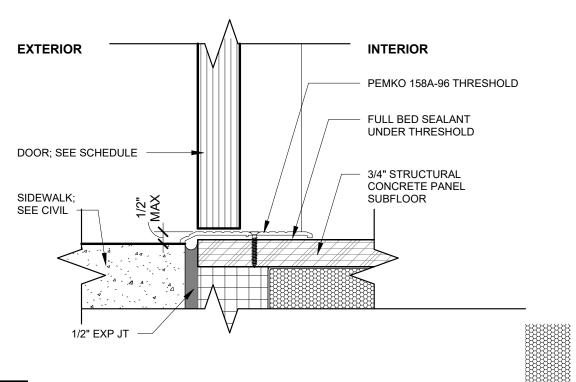


5 DR JAMB @ HM FRAME @ INTERIOR DOOR



DR HEAD @ EXTERIOR DOOR JAMB CONDITION SIMILAR





@ MAIN FLR EXTERIOR DOOR

11/13/2025 9:08:34 AM

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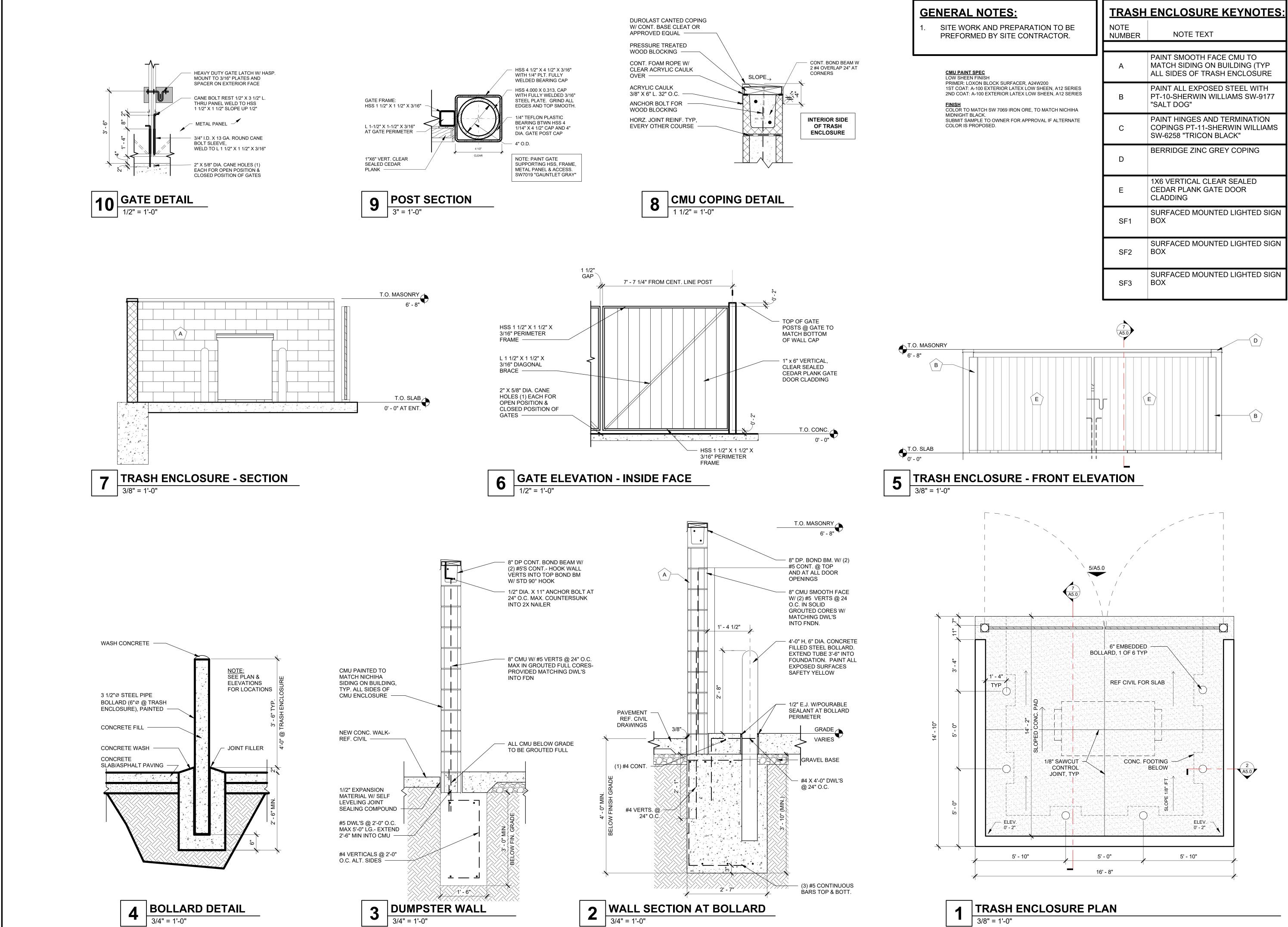


2122 CARLISLE BLVD ALBUQUERQUE, NEW

# Date 11/10/25	Issue/Description
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Checked By:

SCHEDULES & WINDOW ELEVATIONS



11/13/2025 9:08:35 AM

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2122 CARLISLE BLVD ALBUQUERQUE, NEW

DRIVE

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TRASH ENCLOSURE

A5.0

WIRING SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), AND / OR APPLICABLE LOCAL, STATE, AND UTILITY COMPANY RULES, LAWS, AND ORDINANCES.

SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR INSTALLATION OF ELECTRICAL WORK, VERIFY ALL OUTLET LOCATIONS ON JOB PRIOR TO ROUGH-IN. COORDINATE ALL OUTLET BOX LOCATIONS WITH MASONRY, IF ANY, TO MINIMIZE CUTTING AND PATCHING OF BOTH BRICK AND

THE ELECTRICAL CONTRACTOR SHALL COOPERATE WITH OTHER CONTRACTORS, INSTALL EQUIPMENT IN PROPER SEQUENCE AS NOT TO INTERFERE WITH THE PROGRESS OF OTHER CONTRACTORS, AND GIVE GENERAL CONTRACTOR ALL NECESSARY INFORMATION FOR MAKING PROPER PROVISION FOR INSTALLATION OF HIS EQUIPMENT.

ALL MATERIALS SHALL BE NEW, UNLESS OTHERWISE NOTED ON DRAWINGS, CARRY UNDERWIRITER'S LABEL, OR BE "LISTED" BY THAT GROUP AND BE FULLY EQUAL TO MAKES SPECIFIED.

ON RATED WALLS AND SEPARATION WALLS, ALL ELECTRICAL OUTLETS AND SWITCH BOXES ARE REQUIRED TO MEET I.B.C. 711 THRU 714.

INDIVIDUAL HOME-RUNS ARE SHOWN FOR CLARITY ONLY. E.C. CAN COMBINE THEN TOGETHER PER LATEST "NEC". ALL WIRE IS No. 12 THHN COPPER UNLESS OTHER WISE NOTED. ANY 120 VOLT OR 240 VOLT HOME-RUN WITH A DISTANCE LONGER THAN 80' FROM THE PANEL TO THE FIRST DEVICE SHALL BE UPSIZED TO ALLOW FOR VOLTAGE DROP. SEE DRAWINGS AND SCHEDULES.

USE ONLY INSULATED COPPER CONDUCTORS IN CONDUIT WITH A MINIMUM SIZE TO BE 1/2" TRADE SIZE, OR "MC" CABLE IF APPROVED BY LOCAL CODE. USE FLEXIBLE CONDUIT FOR CONNECTIONS TO MOTORS, TRANSFORMERS, AND SIMILAR EQUIPMENT. ALL WIRING SHALL BE CONCEALED, FLUSH OUTLETS, EXCEPT AS NOTED ON DRAWINGS. WIRE INSULATION SHALL BE COLOR COATED AS FOLLOWS OR PER LOCAL ORDNANCES: 120/240V, 1Ø - A-BLACK, B-RED, NEUTRAL-WHITE, G-GREEN.

BRANCH CIRCUIT PANELBOARDS SHALL BE AS NOTED ON DRAWINGS WITH THERMAL MAGNETIC BREAKERS. BREAKERS SHALL HAVE INDIVIDUAL PLASTIC CASES, SIZED AS SCHEDULED. TWO AND THREE POLE BREAKERS SHALL BE COMMON TRIP (SINGLE POLE UNITS WITH COMMON TRIP ARE NOT ACCEPTED). ALL BREAKERS ARE TO BE BOLT-IN. FURNISH AND INSTALL A NEATLY TYPED DIRECTORY CARD, LOCATED ON THE INSIDE OF THE HINGED DOOR. REASSIGN CIRCUITS TO PROPERLY BALANCE THE LOADS ON THE PHASE IF THE FINAL CONNECTIONS AND TEST SHOW IT TO BE

ALL PENETRATIONS IN THE RATED WALLS, FLOOR / CEILING ASSEMBLY, AND THE ROOF / CEILING ASSEMBLY SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAME AND HOT GASES. THE SEALER SHALL HAVE A T-RATING AND F-RATING OF NOT LESS THAN THAT OF THE WALL, FLOOR, OR CEILING BEING PENETRATED. THE ABOVE REQUIREMENTS SHALL MEET I.B.C. 711 THRU 714. A MAXIMUM OF TWO OUTLET BOXES PER STUD SPACE IN THE RATED WALLS. THE MAXIMUM SIZE FOR STEEL OUTLET BOXES ON 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL AREA. BOXES ON OPPOSITE SIDES OF FIRE WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24 INCHES, I.B.C. 711 & 714.

ALL CONDUIT AND OUTLET BOXES (ELECTRICAL, TELEPHONE, COMPUTER, DATA, ECT.) LOCATED IN THE RATED WALLS, FLOOR, CEILING, OR ROOF SHALL BE CONSTRUCTED OF A NON-COMBUSTABLE MATERIAL TO MEET I.B.C.

ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN A NEAT WORKMANLIKE MANNER. UNSIGHTLY INSTALLATIONS SHALL BE REMOVED AND REWORKED AT NO ADDITIONAL EXPENSE TO THE OWNER.

WIRING OF MECHANICAL EQUIPMENT FURNISHED BY OTHERS: FURNISH AND INSTALL ALL POWER WIRING, AND ALL CONTROL WIRING AND INTERLOCK WIRING OF ALL UNITS, PUMPS, FANS, WATER HEATERS, ETC. CONNECT PER MANUFACTURERS WIRING DIAGRAMS. FURNISH AND INSTALL ALL NECESSARY DISCONNECT DEVICES AS REQUIRED. CONTRACTOR TO VERIFY THE ACTUAL WIRING SIZING AMPS FOR ALL EQUIPMENT FROM THE EQUIPMENT NAMEPLATE, ELECTRICAL INSTALLATION SHALL BE BASED ON ACTUAL REQUIRED AMPERAGES, WHICH MAY VERY SOMEWHAT FROM THE WIRE AND EQUIPMENT SIZES SHOWN ON THE DRAWINGS. PROPERLY SIZED ELECTRICAL WIRING AND EQUIPMENT SHALL BE FURNISHED WITHOUT ANY ADDITIONAL COST TO THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL CHANGES TO BE MADE IN THE ELECTRICAL INSTALLATION DUE TO EQUIPMENT VARIANCES SO THAT THE IMPACT ON FEEDERS, PANELS, FUSE AND BREAKER SIZES CAN BE CHECKED PRIOR TO INSTALLATION.

WIRING OF THERMOSTATS AND TEMPERATURE CONTROLS: FURNISH AND INSTALL ALL POWER WIRING, AND ALL CONTROL AND INTERLOCK WIRING OF ALL THERMOSTATS AND TEMPERATURE CONTROL DEVICES INCLUDING NIGHTSTATS, TIME SWITCHES, OVERRIDE TIMERS, ETC. SEE MECHANICAL DRAWINGS FOR LOCATIONS AND TEMPERATURE CONTROL DIAGRAMS.

THE DRAWINGS SHOWING THE LAYOUT OF THE WORK INDICATE THE APPROXIMATE LOCATIONS OF OUTLETS, APPARATUS, AND EQUIPMENT. THE DRAWINGS ARE SCHEMATIC ONLY, AND ARE NOT INTENDED TO SHOW EXACT ROUTING OF CONDUIT, ETC. THE FINAL DETERMINATION AS TO THE ROUTING SHALL BE GOVERNED BY THE STRUCTURAL CONDITIONS AND OTHER OBSTRUCTIONS. THEY SHALL NOT BE CONSTRUED TO MEAN THE DESIGN OF THE SYSTEM MAY BE CHANGED. IT MERELY REFERS TO THE EXACT RUN OF A RACEWAY BETWEEN GIVEN POINTS. THE CONTRACTOR SHALL CONSULT ALL CONTRACT DRAWINGS WHICH MAY AFFECT THE LOCATION OF ANY OUTLET, APPARATUS, OR EQUIPMENT TO AVOID POSSIBLE INTERFERENCE AND PERMIT FULL COORDINATION OF ALL WORK. THE RIGHT TO MAKE ANY REASONABLE CHANGE IN THE LOCATION OF OUTLETS, APPARATUS, AND EQUIPMENT UP TO THE TIME OF ROUGH-IN IS RESERVED BY THE ARCHITECT WITHOUT INVOLVING ANY ADDITIONAL EXPENSE TO THE OWNER.

THE TELEPHONE / DATA SYSTEM SHALL CONSIST OF A CONDUIT SYSTEM ONLY, 1" MINIMUM, IN WALLS FROM THE OUTLET BOX STUBBED INTO THE CEILING CAVITY. ALL COVER PLATES, CONNECTORS, TELEPHONE / DATA WIRES, AND FINAL TERMINATIONS ARE BY OTHERS. COORDINATE ACTUAL AMOUNT OF OUTLET AND LOCATIONS WITH THE OWNER PRIOR TO ROUGH-IN.

i. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR PROVIDE THE UTILITY CO. WITH THE ELECTRICAL LOADS AND FILL OUT ALL APPROPRIATE PAPERWORK AND FORMS.

ON-SITE ELECTRICAL CONTRACTOR RESPONSIBILITIES:

FIELD VERIFY WITH THE LOCAL UTILITY COMPANY FOR THE EXACT REQUIREMENTS AND RESPONSIBILITIES TO BRING THE UNDERGROUND ELECTRICAL PRIMARY TO THE PAD MOUNTED TRANSFORMER LOCATION. VERIFY WHO PROVIDES THE TRANSFORMER AND PAD.

FURNISH & INSTALL THE UNDERGROUND ELECTRICAL SECONDARY FROM PAD MOUNTED TRANSFORMER, BELOW GRADE TO NATMOD BUILDING, THEN UP TO MAIN CIRCUIT BREAKER IN PANEL "A", PROVIDED ON THE BUILDING.

PROVIDE THE GROUNDING FOR MAIN ELECTRICAL SERVICE AS NOTED ON PLANS.

CONNECTION OF MUFFIN TOP: MUFFIN TOP IS FURNISHED AND INSTALLED BY OTHERS. SITE ELECTRICAL CONTRACTOR TO RECONNECT OF THE TWO HALVES OF THE MUFFING TOP AFTER IT IS SET IN PLACE VIA FEEDERS PROVIDED. CONNECT THE MUFFIN TOP TO THE MAIN BASE BUILDING VIA COLOR CODED ELECTRICAL FEEDER STUB-UPS, RED FOR THE POWER CIRCUITS AND BLUE FOR THE TIMER CIRCUITS, TO THE COLOR CODED CORRESPONDING JUNCTION BOXES IN THE MUFFIN TOP. RED BOX FOR THE POWER CIRCUITS AND BLUE BOX THE FOR TIMER CIRCUITS.

CONNECTION OF THE CANOPY ELECTRICAL CIRCUITS: CANOPY IS FURNISHED AND INSTALLED BY NATMOD. CONNECT THE CANOPY ELECTRICAL CIRCUITS TO THE MAIN BUILDING VIA COLOR CODED JUNCTION BOXES AND STUB-OUTS IN MAIN BUILDING TO CORRESPONDING CONNECTIONS AT THE CANOPY, RED FOR POWER AND BLUE FOR TIMER.

ROOF TOP UNIT (FURNISHED AND INSTALLED BY OTHERS): EXTEND PROVIDED ELECTRICAL FEEDER CABLE, LOCATED ABOVE CEILING IN MAIN BUILDING, UP THROUGH ROOF CURB, TO ROOF TOP UNIT. FURNISH AND INSTALL THE REQUIRED DISCONNECT SWITCH AS NOTED ON DRAWINGS.

ROOF MOUNTED ICE MACHINE CONDENSER (FURNISHED AND INSTALLED BY OTHERS): CONNECT ELECTRICAL STUB-UP FROM MAIN BUILDING, THROUGH ROOF, TO TWO ROOF MOUNTED ICE MACHINE CONDENSERS ON ROOF. FURNISH AND INSTALL THE REQUIRED DISCONNECT SWITCH AS

SUMP PUMP IN THE CRAWL SPACE: FURNISH AND INSTALL (1) GFCI RECEPTACLE AND JUNCTION BOX IN THE CRAWL SPACE FOR THE SUMP PUMP. FURNISH & INSTALL CONDUCTORS, UN-SWITCHED FROM EXISTING CIRCUIT LOCATED AT THE LIGHT SWITCH IN THE RESTROOM THROUGH CONDUIT STUB OUT PROVIDED. CONNECT RECEPTACLE TO THE CIRCUIT.

HEAT TRACE IN THE CRAWL SPACE: FURNISH AND INSTALL (1) GFCI RECEPTACLE AND JUNCTION BOX IN THE CRAWL SPACE FOR THE HEAT TRACE. CONNECT TO THE SAME UN-SWITCHED CIRCUIT AS THE SUMP PUMP.

D. LIGHT IN THE CRAWL SPACE: FURNISH AND INSTALL (1) LIGHT FIXTURE TYPE "C" AND JUNCTION BOX IN THE CRAWL SPACE. CONNECT TO THE EXISTING SINGLE POLE SWITCH AND CIRCUIT LOCATED IN RESTROOM VIA STUB OUT. FURNISH AND INSTALL SWITCH LEG FROM THE LIGHT

EXTERIOR COOLER: FURNISH & INSTALL ELECTRICAL FEEDER, CONDUIT, AND WIRE, BELOW GRADE FROM PANEL "A" TO NATMOD PROVIDE COOLER, VERIFY LOCATION, THEN UP TO PANEL "C", FURNISHED ON COOLER. CONNECT TO THE CIRCUIT BREAKER PROVIDED IN PANEL "A".

12. SITE LIGHTING: FURNISH AND INSTALL THE ELECTRICAL BRANCH FEEDER FROM PANEL "A" TO SITE LIGHTING AS DESCRIBED ON SHEET E3.0.

ELECTRICAL DEVICE SCHEDULE

SYM	DESCRIPTION	MFGR. & CAT	No.	RATING		MOUNTING	REMARKS
S	SINGLE POLE SWITCH	PASS & SEYMOUR	PS20AC1-I	20A	125V	48" A.F.F. TO TOP	
os	SWITCH W/ OCCUPANCY SENSOR	WATTSTOPPER	WS-250-W	-	125V	48" A.F.F. TO TOP	
Ф	DUPLEX RECEPT.	PASS & SEYMOUR	TR5362-I	20A	125V	16" A.F.F. TO BOTTOM	
₩	G.F.I. DUPLEX RECEPT.	PASS & SEYMOUR	TR5362-I	20A	125V	AS NOTED	
ø	DEDICATED DUPLEX RECEPT.	PASS & SEYMOUR	2094-TRI	20A	125V	AS NOTED	
•	G.F.I. SINGLEPLEX RECEPT.	PASS & SEYMOUR	2094-TRI	20A	125V	AS NOTED	
#	DOUBLE DUPLEX RECEPT.	PASS & SEYMOUR	(2) TR5362-I	20A	125V	16" A.F.F. TO BOTTOM	
▲	EQUIPMENT RECEPTACLE	PASS & SEYMOUR	3864	20A	250V	AS NOTED	
#	EQUIPMENT RECEPTACLE	PASS & SEYMOUR	3894	50A	250V	AS NOTED	
O	NEMA-3R JUNCTION BOX	STEELCITY	4"x4" BOX			AS REQUIRED	
<u> </u>	NEMA-1 JUNCTION BOX	STEELCITY	4"x4" BOX			AS REQUIRED	
▼	TELEPHNOE OUTLET	STEELCITY	2"x4" BOX			16" A.F.F. TO BOTTOM	WITH 1" C. TO ABOVE CLG.
T	THERMOSTAT	FURN. BY M.C.; INST. & CON	IN. BY E.C.			48" A.F.F. TO TOP	
•	MOTOR	FURN. & INST. BY M.C.; CON	IN. BY E.C.			AS REQUIRED	
•	PHOTOCELL	INTERMATIC	K4121C	1800W 12	25V	ON ROOF FACING NORTH	
TC	TIMECLOCK	INTERMATIC	T101	40A	125V	NEXT TO PANEL	
M	MANUAL STARTER	SQ-D	2510 FG-1	1/2 H.P.	125V	AS REQUIRED	
마	DISCONNECT SWITCH	NEMA 1	2 POLE	AS SCHE	DULED	AS REQUIRED	WITH 125% FLA FRN-R FUSES
Z	DISCONNECT SWITCH	NEMA 3R	2 POLE	AS SCHE	DULED	AS REQUIRED	WITH 125% FLA FRN-R FUSES
C.T.	DENOTES COUNTER TOP MTG.	MINIMUM 1" ABOVE BLACK	SPLASH			FIELD VERIFY	
W.P.	DENOTES WEATHER PROOF						W/ TAYMAC # ML500G COVER PLATE
1,3,5	DENOTES CIRCUIT NUMBERS						

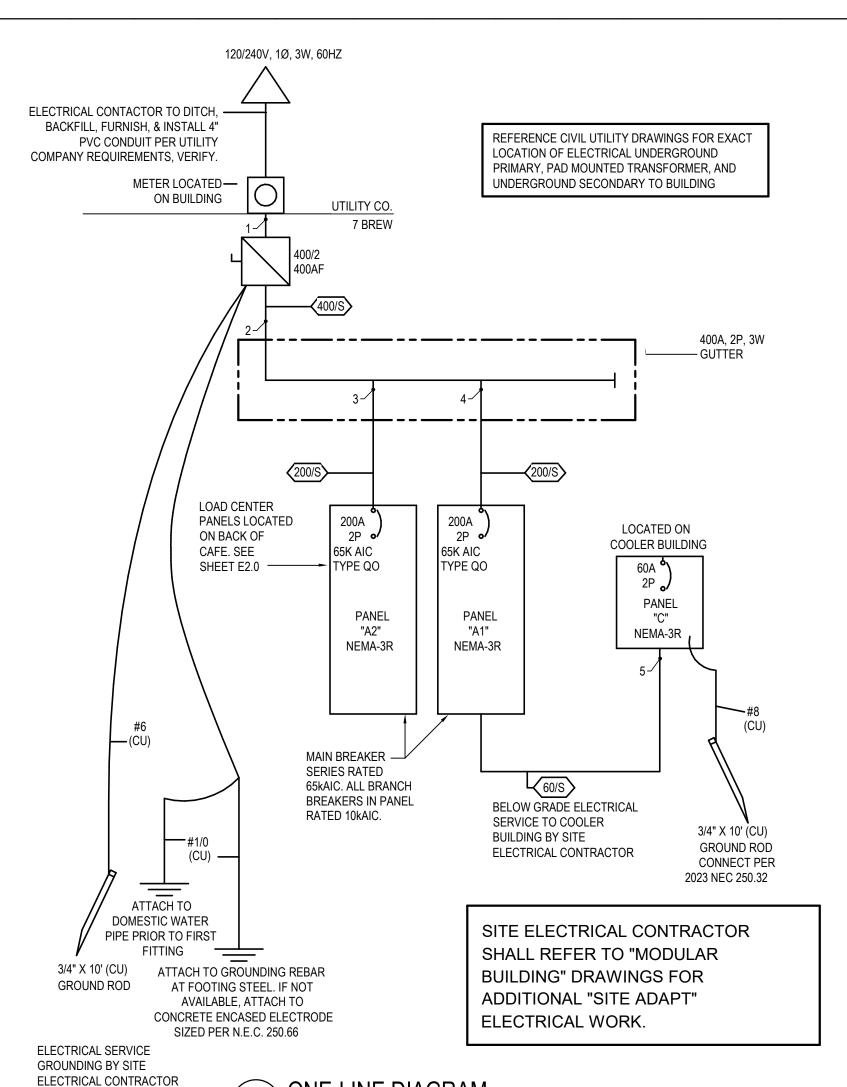
1. APPROVED MANUFACTURERS OTHERS THAN SPECIFIED, PASS & SEYMOUR, G.E., LEVITON, SQUARE-D, CUTLER HAMMER, SIEMANS.

2. ALL 125V NON-LOCKING RECEPTACLES MOUNTED BELOW 5'-6" A.F.F. SHALL BE TAMPER RESISTANT TYPE PER N.E.C. 406-12. 3. REGARDLESS OF CONTROL REQUIREMENTS - ALL FEEDERS FROM SWITCH TO FIRST LIGHT FIXTURE SHALL INCLUDE LOW-VOLTAGE CONTROL WIRES.

SHORT CIRCUIT CURRENT CALCULATIONS

CALC POINT	DESCRIPTION	SOURCE ISC	VOLTAGE (L TO L)	NUMBER OF PARALLEL RUNS	CONDUCTOR MATERIAL	CONDUCTOR SIZE	TYPE OF CONDUIT	LENGTH (FT)	XFMR KVA	XFMR L TO L SECONDARY VOLTAGE	IMPEDANCE %Z	ISC (A)	REMARKS
1	STARTING POINT	-	-	-	-	-	-	-	-	-	-	44,400	-
2	BUSSED GUTTER	44,400	240	2	CU	3/0	N	27	-	-	-	32,677	-
3	PANEL A2	32,677	240	1	CU	3/0	М	20	-	-	-	22,947	-
4	PANEL A1	32,677	240	1	CU	3/0	М	20	-	-	-	22,947	-
5	PANEL C	22,947	240	1	CU	6	N	2	-	-	-	19,826	-

* BASED UPON ASSUMED 150KVA UTILITY TRANSFORMER WITH A 1.8 PERCENT Z.



PANEL A1

1 PHASE 3 WIRE W/ GND BAR 100% NEUTRAL MINIMUM AIC RATING SERIES RATING 42 POLES ONE SECTION

200 AMP

MOTOR

NONCONC.

LMOTOR

		T	 			, ,					
D	ESCRIPTION	LOAD VA	REMARKS	O/C	CKT#	PH	CKT#	O/C	REMARKS	LOAD VA	DESCRIPTION
L-MAIN LIGHTI	NG	328		20/1	1	Α	2	20/1		432	L-CANOPY LIGHTS
L-CANOPY NIC	HT LIGHTS	72		20/1	3	В	4	20/1		1340	L-MUFFIN TOP
L-BUILDING SI	GNAGE	1200		20/1	5	Α	6	20/1	GFCI	900	E-AUDIO SECURITY
L-SITE LIGHTIN	NG	500		20/1	7	В	8	20/1		360	R-SINK AC RECEPTS
R-RECEPTS		720	GFCI	20/1	9	Α	10	20/1	GFCI	360	R-SHOW WINDOW RECEPTS
R-RECEPTS		360	GFCI	20/1	11	В	12	20/1	GFCI	360	R-FRONT BAR RECEPTS
R-GENERAL R	ECEPTS	540	GFCI	20/1	13	Α	14	20/1	GFCI	360	R-FRONT BAR RECEPTS
E-WH-1		200	GFCI	20/1	15	В	16	60/2		3744	E-RTU-1
R-EXTERIOR F	RECEPTS	720		20/1	17	Α	18	*		3744	*
R-RECEPTS		360	GFCI	20/1	19	В	20	20/1		214	E-EF-1,EF-2,EF-3
R-POS RECEP	TS	600	GFCI	20/1	21	Α	22	60/2		3784	PANEL C
R-CRAWL SPA	CE RECEPT	180	GFCI	20/1	23	В	24	*		3784	*
R-ROOFTOP R	ECEPT	180		20/1	25	Α	26	20/1			SPARE
E-CANOPY WA	ARMING HUT (FUTURE)	2500		30/2	27	В	28	20/1			SPARE
*		2500		*	29	Α	30	20/1			SPARE
SPARE				20/1	31	В	32	20/1			SPARE
SPARE				20/1	33	Α	34	20/1			SPARE
SPARE				20/1	35	В	36	20/1			SPARE
SPARE				20/1	37	Α	38	20/1			SPARE
SPACE					39	В	40				SPACE
SPACE					41	Α	42				SPACE
LOAD TYPE	LOAD IN VA	FACTOR	DIV LOAD						TOTAL VA		
RECEPT	4920	NEC	4920					18517		SPARE	
LIGHTING	3872	1.25	4840						VA (W/ CONTIN		
EQUIP	16162	1	16162					-	MIN. FEEDER A		
KITCHEN	5000	0.65	3250						A-PHASE LOAD		
MISC	311	1	311						B-PHASE LOAD		
NONCONC.	0	0	0					0	C-PHASE LOAD		
MOTOD		4									

PANEL A2

240/120V 200 AMP 10000	1 PHASE 3 WIRE W/ G MLO MINIMUM AIC RATING				SURFACE 100% NEU SERIES R	JTRAL					
42 POLES	ONE SECTION										
D	ESCRIPTION	LOAD VA	REMARKS	O/C	CKT#	PH	CKT#	O/C	REMARKS	LOAD VA	DESCRIPTION
E-EQ-2		800	GFCI	20/1	1	Α	2	20/1	GFCI	800	E-EQ-11
E-EQ-3		4368	GFCI	50/2	3	В	4	20/1	GFCI	800	E-EQ-11
*		4368	GFCI	*	5	Α	6	20/1	GFCI	800	E-EQ-11
E-EQ-4		4000	GFCI	50/2	7	В	8	20/1	GFCI	800	E-EQ-12
*		4000	GFCI	*	9	Α	10	20/1	GFCI	1200	E-EQ-14
E-EQ-4		4000	GFCI	50/2	11	В	12	20/1	GFCI	1200	E-EQ-16
*		4000	GFCI	*	13	Α	14	20/1	GFCI	600	E-AC-1
E-EQ-5		1595		30/2	15	В	16	20/1	GFCI	600	E-AC-2
*		1595		*	17	Α	18	20/1	GFCI	600	E-AC-3
E-EQ-5		1595		30/2	19	В	20	20/1	GFCI	600	E-AC-4 (FUTURE)
*		1595		*	21	Α	22	30/2		2160	E-IR-1 CANOPY HEATER
E-EQ-6		150	GFCI	20/1	23	В	24	*		2160	*
E-EQ-7		1380	GFCI	20/1	25	Α	26	30/2		2160	E-IR-2 CANOPY HEATER
E-EQ-8		1380	GFCI	20/1	27	В	28	*		2160	*
E-EQ-8		1380	GFCI	20/1	29	Α	30				SPACE
E-EQ-10		1300	GFCI	20/2	31	В	32				SPACE
*		1300	GFCI	*	33	Α	34				SPACE
E-EQ-10		1300	GFCI	20/2	35	В	36				SPACE
*		1300	GFCI	*	37	Α	38				SPACE
E-EQ-10 (FUTU	JRE)	1300	GFCI	20/2	39	В	40				SPACE
*		1300	GFCI	*	41	Α	42				SPACE
LOAD TYPE	LOAD IN VA	FACTOR	DIV LOAD					43284	TOTAL VA		
RECEPT	LONDINVA	0 NEC						4716		SPARE	-
LIGHTING		0 1.25							VA (W/ CONTIN		-
EQUIP		11040 1	11040						MIN. FEEDER A		-
KITCHEN		49606 0.65							A-PHASE LOAD		1
MISC		0 1	0						B-PHASE LOAD		-

0 C-PHASE LOAD

PANEL C

040/400/	4 DUACE 2 MIDE MI CND D	<u> </u>			CUDEACE	MOLII	NITED				
240/120V	1 PHASE 3 WIRE W/ GND BA	AR .			SURFACE						
60 AMP	MLO				100% NEU						
10000	MINIMUM AIC RATING				SERIES R	_					
12 POLES	ONE SECTION				SOURCE		A1				
ı	DESCRIPTION	LOAD VA	REMARKS	O/C	CKT#	PH	CKT#	O/C	REMARKS	LOAD VA	DESCRIPTION
E-WALK-IN EV	JAPERATOR	400		20/1	1	Α	2	20/1		311	M-COOLER LIGHT&RECEPT
R-COND. UNIT		180		20/1	3	В	4	30/2		1800	E-WALK-IN CONDENSER
E-HEAT TAPE	<u> </u>	1500	GFEP	20/1	5	Α	6	*		1800	*
E-SUMP PUM	IP/HEAT TRACE/LIGHT	1500	GFCI	20/1	7	В	8	20/1			
SPACE					9	Α	10				SPACE
SPACE					11	В	12				SPACE
LOAD TYPE	LOAD IN VA	FACTOR	DIV LOAD					7491	TOTAL VA		
RECEPT	180							6831		SPARE	-
LIGHTING	0	1.25							VA (W/ CONTIN		
EQUIP	7000		7000						MIN. FEEDER A		
KITCHEN	0								A-PHASE LOAD		
MISC	311	1	311						B-PHASE LOAD		
NONCONC.	0	0	0					0	C-PHASE LOAD	1	
MOTOR	0	1	0								
LMOTOR	0	1.25	0								

			<u>C</u>	OPPER		
	#	FEEDER TYPE	SETS	CONDUIT	PHASE AND/ OR NEUTRAL	GND
İ	20/1	20F2	1	1/2"	(2)#12	(1)#12
ĺ	30/2	30F2	1	3/4"	(2)#10	(1)#10
ĺ	40/2	40F2	1	1"	(2)#8	(1)#10
Ī	50/2	50F2	1	1"	(2#)8	(1)#10

2-WIRE FEEDER SCHEDULE | 3-WIRE FEEDER SCHEDULE

		<u>AL</u>	<u>.UMINUM</u>	<u>1</u>	
(#)	FEEDER TYPE	SETS	CONDUIT	PHASE AND/ OR NEUTRAL	GND
60/S	60S3	1	1 1/4"	(4)#6	(1)#8
200/S	200F3	1	2"	(4)250 KCM	(1)#4 AL
400/S	400S3	2	2 1/2"	(3)250 KCM	N/A
400/S	400S3	1	4"	(3)750 KCM	N/A

1. AMPACITY BASED UPON NEC, TABLE 310.15.B.16 2. ALUMINUM CONDUCTORS SHALL BE XHHW-2 (90°) COMPACT STRANDED CONDUCTORS.

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Issue/Description

ELECTRICAL SCHEDULES

EQUIPMENT CONNECTION SCHEDULE VOLTAGE LOAD DISCONNECT DEVICE AT UNIT FUZE SIZE IN BREAKER & NOTES DESCRIPTION FEEDER SIZE WALK-IN COOLER - LIGHTS CONNECT AS REQUIRED - 4 1 X 3.60 17.3 21.6 X WALK-IN COOLER - COMPRESSOR CONNECT AS REQUIRED - 4 0.40 3.25 4.06 X 1.85 15.4 19.3 X WALK-IN COOLER - EVAPORATOR CONNECT AS REQUIRED - 4 BUNN WATER HEATER CONNECT AS REQUIRED NEMA L6-50 RECEPT. - 3 ESPRESSO MACHINE 1 X 6.10 25.4 31.8 X ESPRESSO MACHINE 8.00 33.3 41.6 X NEMA L6-50 RECEPT. ICE MAKER (REMOTE COMPRESSOR) CONNECT AS REQUIRED -0.14 1.20 1.50 X NEMA 5-20 RECEPT. -ICE MAKER (UPRIGHT) VITAMIX BLENDER 1.38 11.5 14.4 X NEMA L6-30 RECEPT. EQ-10A SPACEMAN FREEZE MACHINE 2.40 10.0 12.5 X NEMA 6-20 RECEPT. -EQ-10B SPACEMAN FREEZE MACHINE 2.40 10.0 12.5 X NEMA 6-20 RECEPT. 0.80 6.66 8.33 X 0.80 6.66 8.33 X COFFEE GRINDER NEMA 5-20 RECEPT COFFEE GRINDER NEMA 5-20 RECEPT EQ-14 48" X 24" STANDING COOLER 1.20 10.0 12.5 X NEMA 5-20 RECEPT EQ-16 UNDERCOUNTER COOLER 1.20 10.0 12.5 X NEMA 5-20 RECEPT. AIR CURTAIN WITHOUT ELECTRIC HEAT 0.60 5.10 6.38 X NEMA 5-20 RECEPT. AIR CURTAIN WITHOUT ELECTRIC HEAT (FUTURE) NEMA 5-20 RECEPT. WATER HEATER 0.48 4.00 5.00 X CONNECT AS REQUIRED RTU-1 AIR CONDITIONER IR-UNITS CANOPY HEATER **EQUIPMENT NOTES** SYMBOL KEY TS - TOGGLE SWITCH

SW - FUSIBLE DISCONNECT SWITCH

R-STANDARD RECEPTACLE

M-MOTOR STARTER SWITCH J-JUNCTION BOX. VERIFY

G - GFCI RECEPTACLE

DISCONNECT MEANS NF NON-FUSED

DISCONNECT SWITCH

1. ALL KITCHEN EQUIPMENT ELECTRICAL REQUIREMENTS AND CONNECTIONS ARE DESIGNED ACCORDING TO INFORMATION PROVIDED AT TIME OF DESIGN. THE ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL ELECT. LOADS, LOCATIONS, CONNECTION, AND PLUG CONFIGURATION REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. IN THE EVENT THAT THE EQUIPMENT PROVIDED DIFFER FROM THE FINAL DRAWINGS IT IS THE RESPONSIBILITY OF THE EQUIP.

SUPPLIER/INSTALLER TO PROVIDE THE ELECTRICAL CONTRACTOR WITH THESE CHANGES.

- 2. ALL SWITCHES, TIMECLOCKS, RELAYS, TRANSFORMERS, ETC, SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR, UNLESS SUPPLIED WITH THE EQUIPMENT. FIELD VERIFY WITH EQUIPMENT SUPPLIER FOR ADDITIONAL INFORMATION.
- 3. PER N.E.C. 210.8 (B) (2) ALL 120V/10, 208V/1ØRECEPTACLES RATED 50 AMPS OR LESS, AND 208V,3Ø RECEPTACLES RATED 100 AMPS OR LESS LOCATED IN THE KITCHEN AREAS SHALL BE PROTECTED BY A GFCI TYPE RECEPTACLE OR GFCI TYPE CIRCUIT BREAKER IN THE PANEL, UNLESS OTHERWISE NOTED.
- 4. WALK-IN COOLER IS OWNER PROVIDED. SITE ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND CONNECTION REQUIREMENTS. PROVIDE ALL DISCONNECT SWITCHES NOT PROVIDED WITH EQUIPMENT AND CONNECT TO PANEL "A" AS REQUIRED.
- 5. ROOF TOP UNIT IS FURNISH WITH DISCONNECT SWITCH. E.C. TO FIELD VERIFY EXACT CONNECTION REQUIREMENTS WITH EQUIPMENT PROVIDED PRIOR TO ROUGH-IN.
- 6. CANOPY HEATERS AND CONTROLS ARE FURNISHED AND INSTALLED BY OTHERS AND CONNECTED BY SITE ELECTRICAL CONTRACTOR. E.C. TO FIELD VERIFY EXACT DISCONNECT REQUIREMENTS, FURNISH AND INSTALL AS REQUIRED.

MECHANICAL/ELECTRICAL COORDINATION SCHEDULE

	EQUIPMENT				ELE	CTRICAL DA	TA		DISCO	NNECT	
MARK	DESCRIPTION	LOAD	VOLTS	PH	SCCR RATING	MOCP	FEEDER OR BRANCH CIRCUIT	PANEL : CIRCUIT	TYPE	RATING (AMPS)	REMARKS
RTU-1	ROOFTOP UNIT	34 MCA	240	1	5000	50	50F2	A1:16,18	SS	60	-
EF-1	EXHAUST FAN	70 W	115	1	5000	-	20F2	A1:20	S	20	-
AC-1	AIR CURTAIN (NON HEATED)	3.1 MCA	120	1	5000	-	20F2	A2:14	S	20	-
AC-2	AIR CURTAIN (NON HEATED)	3.1 MCA	120	1	5000	-	20F2	A2:16	S	20	-
AC-3	AIR CURTAIN (NON HEATED)	3.1 MCA	120	1	5000	-	20F2	A2:18	S	20	-
IR-1	INFRARED RADIANT HEATER (GAS)	40 VA	24	1	5000	-	20F2	A2:22	S	20	1
IR-2	INFRARED RADIANT HEATER (GAS)	40 VA	24	1	5000	-	20F2	A2:22	S	20	1
IR-3	INFRARED RADIANT HEATER (GAS)	40 VA	24	1	5000	-	20F2	A2:22	S	20	1
IR-4	INFRARED RADIANT HEATER (GAS)	40 VA	24	1	5000	-	20F2	A2:22	S	20	1
SP-1	SUMP PUMP	9.7 FLA	115	1	5000	-	20F2	C:7	S	20	-
-	HEAT TRACE	600 W	120	1	5000	-	20F2	C:7	S	20	-
WH-1	WATER HEATER	4 FLA	120	1	5000	10	20F2	A1:15	S	20	-

- a. VERIFY/COORDINATE RATINGS FOR EQUIPMENT SUPPLIED BY THE SELECTED MANUFACTURER. WHERE RATINGS ARE OTHER THAN AS REQUIRED FOR SPECIFIED
 - UNIT, DISCONNECTS, OVERCURRENT DEVICES AND RELATED REVISIONS SHALL BE PROVIDED ACCORDINGLY. THE CONTRACTOR THAT FURNISHES EQUIPMENT WITH RATINGS OTHER THAN AS NOTED SHALL BE RESPONSIBLE FOR COORDINATION AND COSTS FOR REVISIONS TO ACCOMMODATE SELECTED EQUIPMENT.
 - b. FRACTIONAL HORSEPOWER SINGLE PHASE MOTORS SHALL BE PROVIDED WITH INTEGRAL OVERLOAD PROTECTION.
- c. DISCONNECTS SHALL BE FUSIBLE UNLESS NOTED OTHERWISE.
- d. ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT TO EQUIPMENT AS INDICATED. e. WHERE DISCONNECT IS NOT INDICATED ON PLANS, LOCATE AT EQUIPMENT PER NEC.
- f. EQUIPMENT IDs THAT END IN ".X" INDICATE THAT THERE ARE MULTIPLE UNITS THAT ARE IDENTICAL AND PROVIDED ON THE PROJECT.
- SEE PLANS FOR THE UNIQUE SEQUENTIAL DESIGNATION.

1. COORDINATE WITH MANUFACTURER FOR CONNECTION OF LOW-VOLTAGE CANOPY HEATERS. ELECTRICAL CONTRACTOR SHALL PROVIDE TRANSFORMER TO STEP DOWN FROM 120VAC AS

SPECIAL OUTLET SCHEDULE

DESCRIPTION L6-50R RECEPTACLE FOR POWER CONNECTION TO OWNER FURNISHED EQUIPMENT. FIELD VERIFY & CONTRACTOR TO COORDINATE EXACT PLUG AND CONNECTION REQUIREMENTS WITH EQUIPMENT PROVIDED PRIOR TO ROUGH-IN.

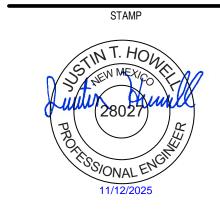
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ELECTRICAL KEYNOTES (#)

NON HEATED AIR CURTAIN TO BE MOUNTED ABOVE SERVICE WINDOW / DOOR. RECEPTACLE FOR DISCONNECTING MEANS TO BE ADJACENT TO AIR CURTAIN AT SAME HEIGHT. AIR CURTAIN PROVIDED WITH CORD AND PLUG.

PROVIDE RECEPTACLES IN CEILING FOR CHILLER MACHINES. FIELD VERIFY EXACT LOCATION & CONNECTION REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN.

RECEPTACLE MOUNTED UP HIGH FOR FUTURE NON HEATER AIR CURTAIN. FIELD VERIFY EXACT HEIGHT



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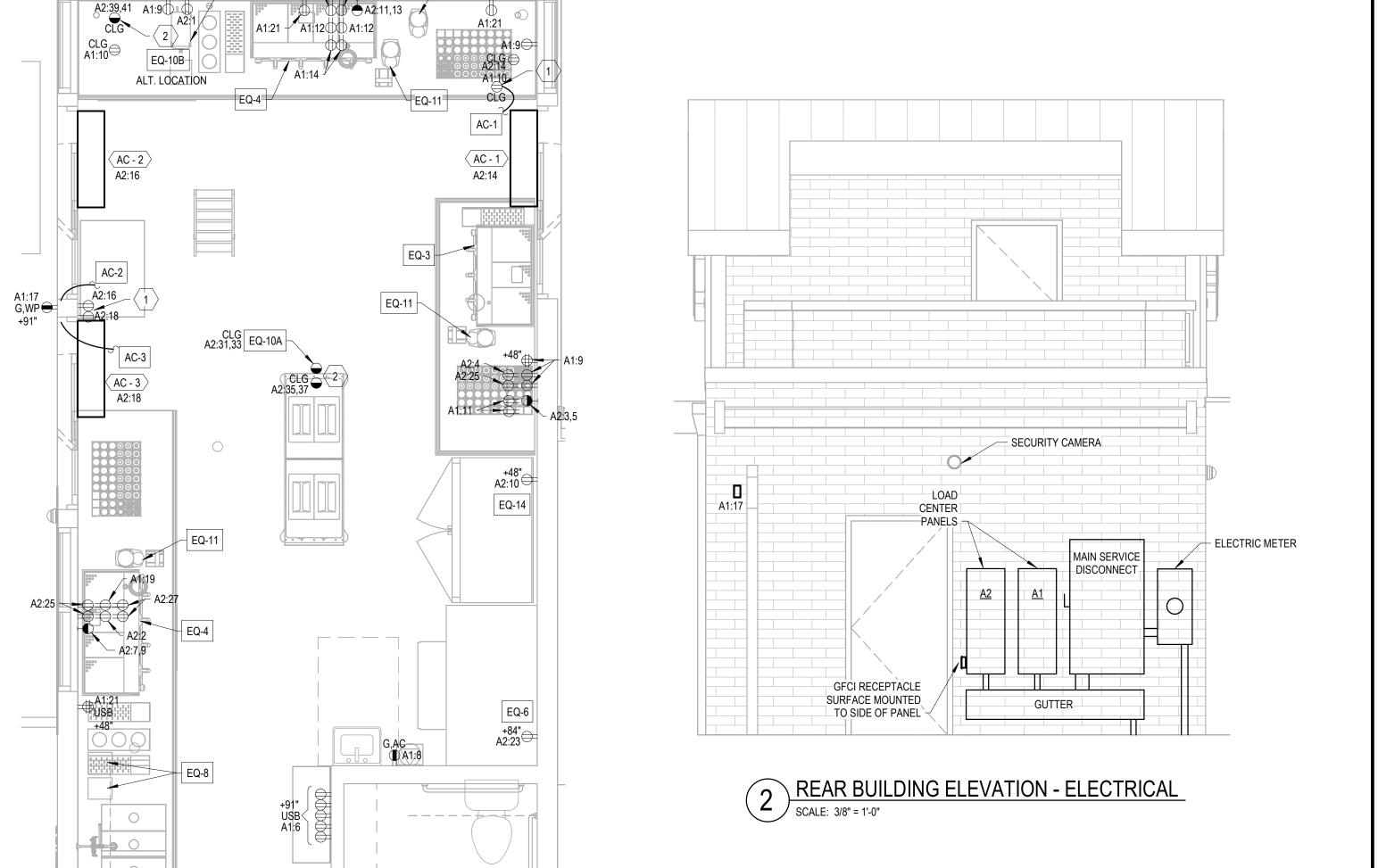




 $\widehat{\mathbf{H}}$ SL

Issue/Description

ELECTRICAL FLOOR PLAN -POWER (MODULAR BUILDING)



ELECTRICAL FLOOR PLAN - POWER

DISCONNECT.

ELECTRIC METER BY E.C. METER BY UTILITYCO.

PER UTILITY CO. REQT'S.

(STE ADAPT)

G,AC A1:13 WH - 1

MAIN PANELS "A1" AND "A2" W/ 200 AMP MAIN BREAKERS IN NEMA-3R ENCLOSURE PROVIDED WITH MODULAR BUILDING. MAIN 400 AMP FUSED DISCONNECT.

> SEE DETAIL 2, THIS SHEET FOR EXTERIOR WALL ELEVATION

> > REAR COOLER ELEVATION

ENCLOSURE -

LUMINAIRE SCHEDULE

ID	MANUFACTURER	CATALOG NO.	DESCRIPTION	VOLTAGE	DIMMING	MOUNTING	TYPE	WATTS	LUMENS	EFFICACY	ССТ	CRI	REMARKS
A1	ENVISION	LED-BPL-2X4-3M40-5CCT	2X4 LED FLAT PANEL	120/277	0-10V	RECESSED	LED	30	3900	130.00	4000	80	-
A2	ENVISION	LED-BPL-2X2-3M40-5CCT	2X2 LED FLAT PANEL	120/277	0-10V	RECESSED	LED	30	3900	130.00	4000	80	-
В	ENVISION	LED-SL-PNL-6R-3P15W-5CCT-WH	EXTERIOR LED CANOPY LIGHT	120	5%-100%	RECESSED	LED	12	950	79.17	2700	90	3
С	LEVITON	9850-LED	UTILITY LIGHT	120	N/A	SURFACE	LED	11	800	72.73	3000	90	1
D	SARIN	SES-UNF-WHITE-4.2W/FT-120°-AC110-120V	EXTERIOR LED FLEX LIGHT	120	N/A	SURFACE	LED	4.2/FT	255/FT	N/A	-	N/A	-
EM	ENVISION	LED-EM-DHC-WH	EMERGENCY LIGHT WITH BATTERY BACK-UP	120/277	N/A	SURFACE	LED	3	140	46.67	6000	N/A	2
EM1	ENVISION	ED-WPE-15W-TRI-PC-BZ-EMB	EXTERIOR EMERGENCY LIGHT WITH BATTERY BACK-UP	120/277	N/A	SURFACE	LED	15	1950	130.00	5000	N/A	-
F	ENVISION	LED-VPT-4FT-3P50-5CCT-UNV	ENCLOSED CEILING LIGHT	120/277	0-10V	SURFACE	LED	50	4000	80.00	4000	80	-
X1	ENVISION	LED-EM-EXT-RG-WH-CMB-RC	EXIT SIGN WITH EM LIGHTS AND BATTERY BACK-UP	120/277	N/A	SURFACE	LED	3.5	140	40.00	5000	N/A	2

a. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR LUMINAIRES, DRIVERS, AND EMERGENCY BACKUP.

1. FIXTURE USES GU24 SQUAT LED BULB. WATTAGE AND LUMENS ARE DERIVED FROM BULB INFORMATION.

b. CONTRACTOR TO VERIFY LUMINAIRE CATALOG NUMBER AND INSTALLATION REQUIREMENTS PRIOR TO ORDERING.

2. LUMEN RATING IS FOR EACH HEAD. 3. FIXTURES SHOWN HALF-FILLED AND MARKED 'NL' ARE TO BE PROVIDED ON A SEPARATE CIRCUIT WITH EMERGENCY BATTERY BACKUP TO SERVE AS EGRESS LIGHTING DURING POWER LOSS.

OCCUPANCY / DAYLIGHT HARVESTING SENSOR CEILING MOUNT SENSOR EQUAL TO SENSORWORX # SWX-211-2-D. LIGHTS WILL GRADUALLY DIM IN ORDER TO MAXIMIZE ENERGY SAVINGS WHILE MAINTAINING DESIRED OVERALL LIGHTING LEVEL. LIGHTS ARE SWITCHED OFF IF AMBIENT LIGHT LEVEL SURPASSES THRESHOLD AND BACK ON IF LEVEL DROPS. LIGHTING IS HELD OFF IF SUFFICIENT AMBIENT LIGHT LEVEL IS PRESENT UPON INITIAL OCCUPANCY. LIGHTING WILL TURN ON IF LIGHT LEVEL DROPS BELOW SETPOINT. ONCE ON, LIGHTING WILL ONLY TURN OFF FROM VACANCY OR A MANUAL SWITCH, NEVER FROM DAYLIGHT. FORM MANUAL

OVERRIDE SWITCH, CONNECT BETWEEN THE SENSOR AND THE LOAD.

CANOPY LIGHTING NOTE: CANOPY LIGHTING IS SHIPPED TO THE SITE INSTALLED IN THE CANOPY. SITE ELECTRICAL CONTRACTOR TO CONNECT THE INSTALLED COLOR CODED ELECTRICAL

> LIGHTING CIRCUIT BOX -

EVERYTHING ON THIS SHEET HAS BEEN CONSTRUCTED/INSTALLED IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE JOB SITE FOR 'SITE ADAPT' CONSTRUCTION. REFER TO 'SITE ADAPT' DRAWINGS FOR ADDITIONAL INFORMATION.

FEEDERS FROM THE CANOPY LIGHTING TO THE COLOR CODED JUNCTION BOXES INSTALLED IN ABOVE THE CEILING OF THE REQUIREMENTS ON SITE PRIOR TO ROUGH-IN.

ELECTRICAL KEYNOTES (#)

- 1. EXTERIOR SIGN BOX / MENU BOARD. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATION PRIOR TO ROUGH-IN. TYP OF 3. FIELD VERIFY CONTROL REQUIREMENTS.
- 2. LIGHT SWITCH FOR CRAWL SPACE LIGHT WITH CONDUIT STUBBED DOWN THRU FLOOR. CONNECT TO CIRCUIT AS NOTED FOR SUMP PUMP, HEAT TRACE, AND LIGHT IN CRAWL SPACE.
- STORE SIGNAGE: SEE ARCH. DRAWINGS FOR ELEVATION. PROVIDE DISCONNECTING MEANS AS REQUIRED.
- CONTROLLED BY TIMECLOCK.
- 4. 2 POLE TIMECLOCK. CONNECT ALL MODULAR EXTERIOR LIGHTING TO POLE ONE, AND SITE ADAPT CANOPY LIGHTING TO POLE 2.
- OCCUPANCY / DAYLIGHT HARVESTING SENSOR MOUNTED CEILING. SEE NOTE.
- 6. JUNCTION BOX ABOVE CEILING, PAINTED BLUE AND MARKED "TIMER", FOR CANOPY LIGHTING CONTROLLED BY TIMECLOCK. CONNECTION TO CANOPY LIGHTS BY SITE ELECTRICAL CONTRACTOR.
- JUNCTION BOX ABOVE CEILING, PAINTED RED AND MARKED "POWER", FOR CANOPY LIGHTING NOT CONTROLLED BY TIMECLOCK. SIGN / MENU BOXES CONNECTION TO CANOPY LIGHTS BY SITE ELECTRICAL
- 8. INFRARED CONTROLLER FURNISHED BY OTHERS, INSTALLED AND CONNECTED BY E.C. FIELD VERIFY EXACT LOCATION & CONNECTION REQUIREMENTS WITH EQUIPMENT SUPPLIED PRIOR TO ROUGH-IN.
- 9. LIGHTING CIRCUIT. ALL LIGHTS CONTAINED WITHIN LIGHTING CIRCUIT BOX TO BE CIRCUITED AS SHOWN.
- 10. GC TO PROVIDE SHIELDING FOR FIXTURE "D" (LED STRIP) PER NIGHT SKY PROTECTION ACT.

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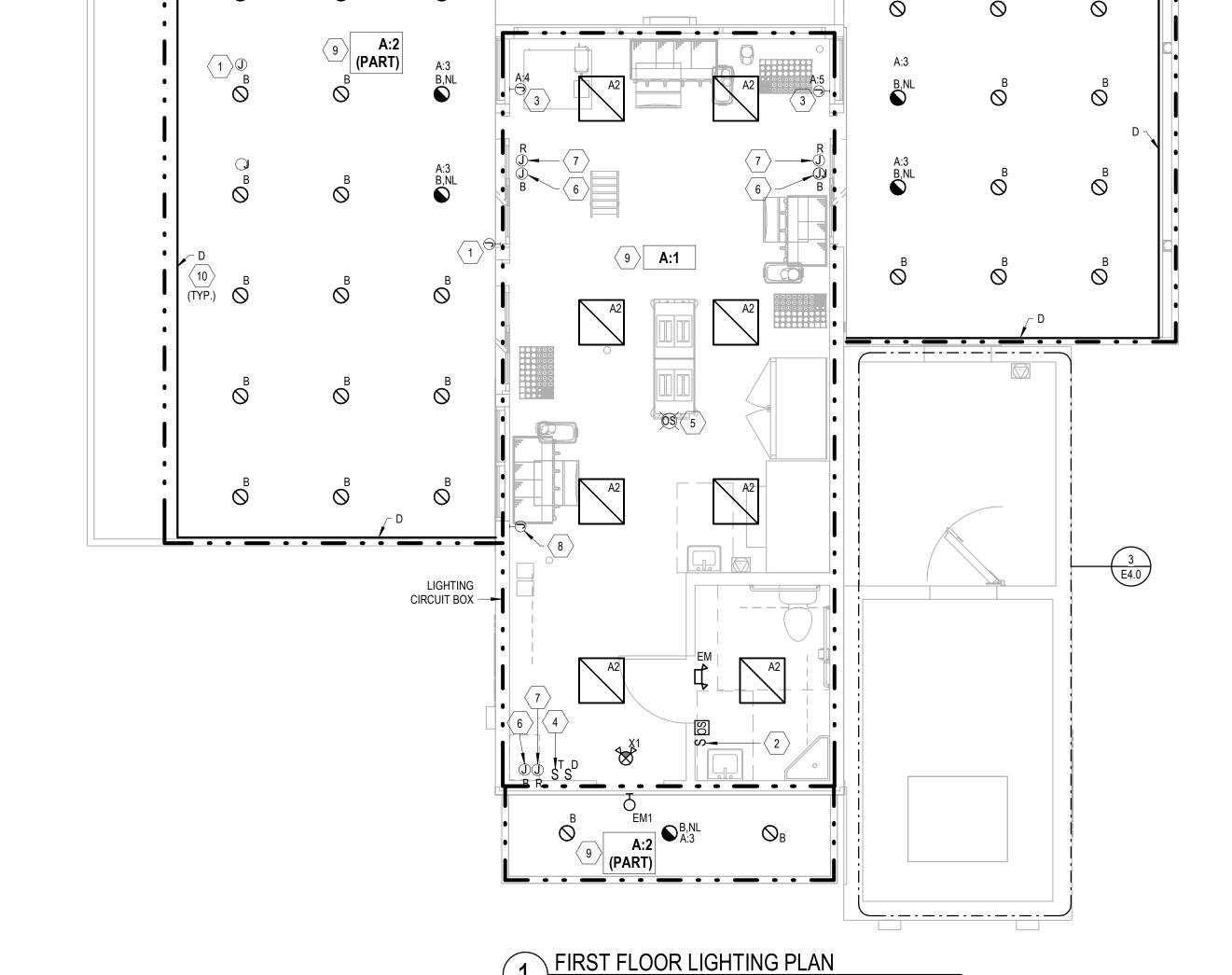


ELECTRICAL FLOOR PLAN -LIGHTING (MODULAR BUILDING)

E3.0

Luminaire So	chedule								
Symbol	Qty	Label		Arrangement	Total La	amp Lumens	LLF		
+	8	(A 2x2) le	ed-bp12x2-3m40-5cct-	SINGLE	3542.2		1.000		
\odot	36	(B) LED-SI	-PNL-6R-3P1	SINGLE	1150		1.000		
Calculation	Summary								
Label			CalcType	Units	Avg	Max]	Min	Avg/Min	Max/Min
BACK OF HOUS	SE_Floor		Illuminance	Fc	30.16	42.7	11.6	2.60	3.68
CAFE AREA_Wo	orkplane		Illuminance	Fc	26.00	38.5	8.4	3.10	4.58
ELECTRICAL (CANOPY_Wo:	rkplane	Illuminance	Fc	11.68	14.3	7.8	1.50	1.83
RESTROOM_Flo	oor		Illuminance	Fc	15.17	18.5	12.6	1.20	1.47

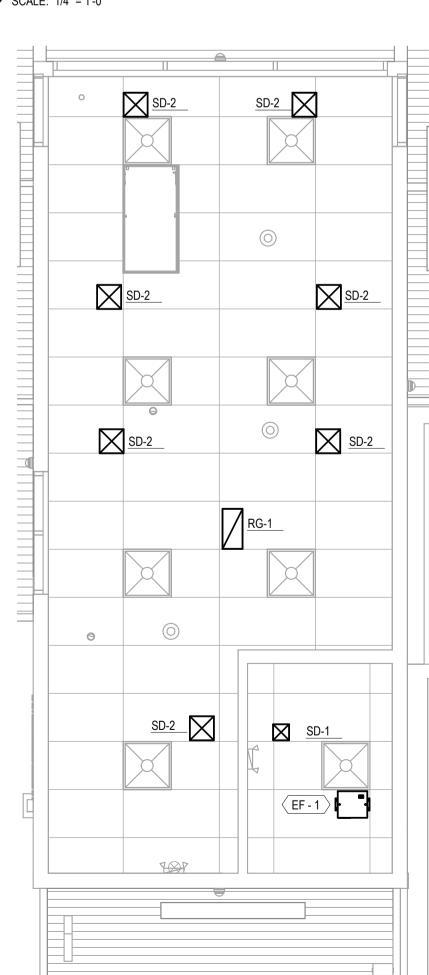




SCALE: 1/4" = 1'-0"

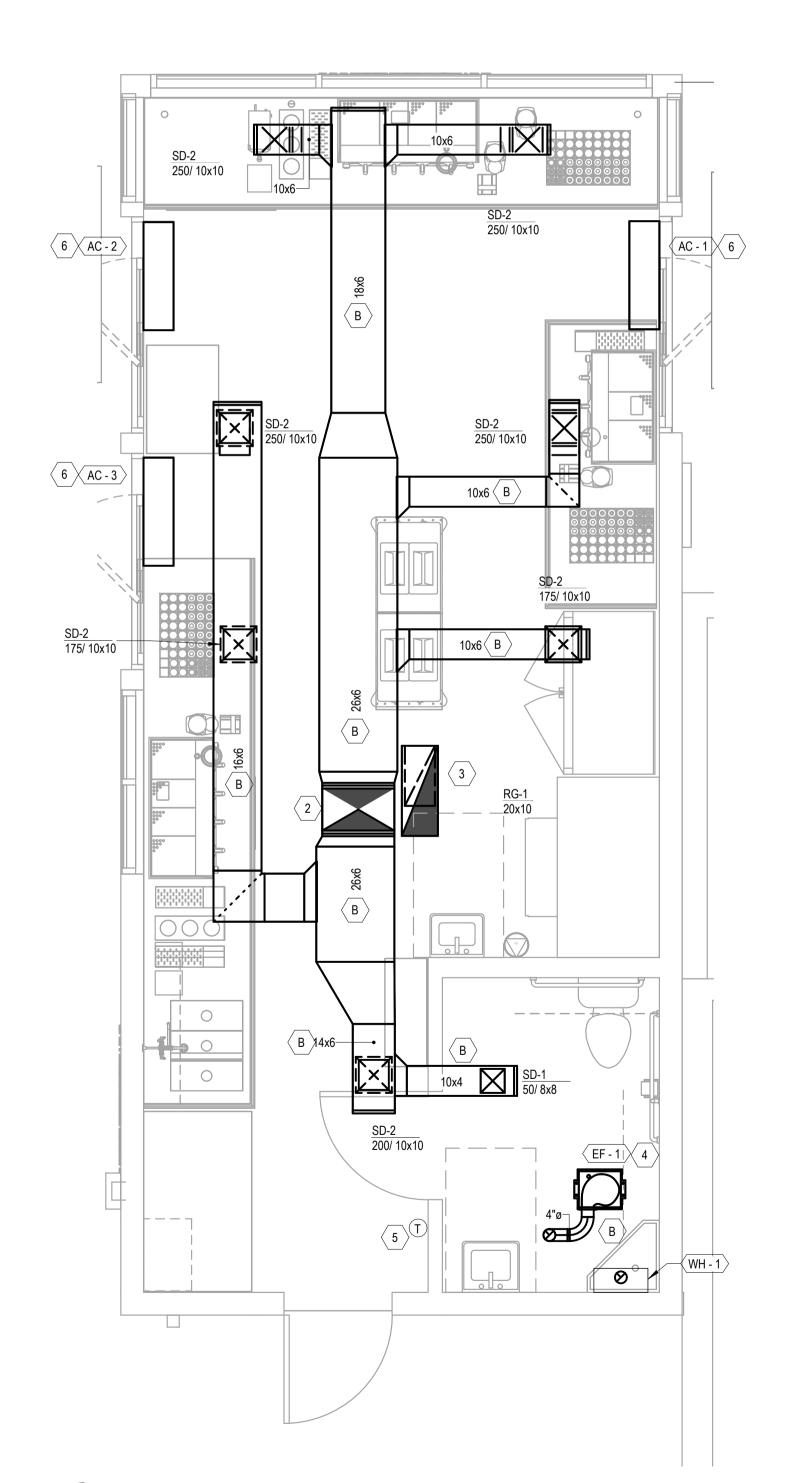
2 ELECTRICAL FLOOR PLAN - PHOTOMETRIC SCALE: 1/4" = 1'-0"

ROOF MECHANICAL PLAN



MECHANICAL REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"



A FIRST FLOOR MECHANICAL PLAN

SCALE: 3/8" = 1'-0"

MECHANICAL KEY NOTES: (#)

- 1. ROOFTOP UNIT (RTU) ROOF CURB FOR RTU-1. 'ON-SITE' CONTRACTOR TO INSTALL RTU-1 REFER TO 'SITE ADAPT' PLANS FOR ADDITIONAL INFORMATION.
- 2. 24" x 14" SA DUCT UP TO RTU-1 ROOF CURB. 'ON-SITE' CONTRACTOR TO CONNECT SA DUCT REFER TO 'SITE ADAPT' PLANS FOR ADDITIONAL INFORMATION.
- 3. 30" x 12" RA DUCT UP TO RTU-1 ROOF CURB. 'ON-SITE' CONTRACTOR TO CONNECT RA DUCT REFER TO
- 4. CEILING MOUNT EXHAUST FAN (EF). EXTEND EXHAUST DUCT THRU ROOF & TERMINATE PER MANUFACTURER'S INSTRUCTIONS. PROVIDE INSECT SCREEN.
- 5. THERMOSTAT (THIS AREA) ROUTE LOW-VOLTAGE WIRING UP THRU WALL TO ABOVE CEILING & EXTEND TO RTU-1 ROOF CURB. PROVIDE 5'-0" OF EXCESS WIRING FOR CONNECTION TO RTU-1 BY 'ON-SITE'
- 6. WALL MOUNT AIR CURTAIN WITH 'BUILT-IN' CONTROLS.

'SITE ADAPT' PLANS FOR ADDITIONAL INFORMATION.

- 7. NOT USED.
- 8. NOT USED.
- 9. INSTALL CONCENTRIC VENT KIT PER MANUFACTURER GUIDELINES.

DUCTWORK KEY NOTES: (#)

- A. DUCT ROUTED BETWEEN OVERHEAD ROOF STRUCTURE BY MODUALL.
- B. DUCT ROUTED BELOW OVERHEAD ROOF STRUCTURE BY MODUALL.

ONSITE MECHANICAL CONTRACTOR NOTES

- HVAC SYSTEM ROOFTOP UNIT (RTU-1) IS PROVIDED & SHIPPED TO THE SITE BY MODUALL. 'RTU-1' TO BE INSTALLED ON-SITE BY THE ON-SITE MECHANICAL CONTRACTOR. 'RTU-1' IS NOT BEING INSTALLED BY OR AT THE MODUALL LOCATION.
- 2. THE ONSITE MECHANICAL CONTRACTOR IS REQUIRED TO PROVIDE & INSTALL ALL SUPPLY AIR (SA) & RETURN AIR (RA) DUCTWORK BETWEEN 'RTU-1' & SA/RA DUCT CONNECTIONS INSIDE THE MODULAR BUILDING.
- 3. ON-SITE MECHANICAL CONTRACTOR IS REQUIRED TO SEAL ALL SA & RA DUCTWORK THAT IS INSTALLED BY THE ONSITE MECHANICAL CONTRACTOR.
- 4. THE ONSITE MECHANICAL CONTRACTOR IS REQUIRED TO PROVIDE & INSTALL ALL CONDENSATE PIPING BETWEEN 'RTU-1' & TERMINATION AT NEAREST SCUPPER.
- 5. THERMOSTAT & THERMOSTAT CONTROL WIRING PROVIDED & INSTALLED BY MODUALL. 'EXCESS' CONTROL WIRING IS LOCATED ABOVE THE 'LAY-IN' CEILING FOR ON-SITE MECHANICAL CONTRACTOR TO EXTEND &
- CONNECT TO 'RTU-1'.

 6. ICE MACHINE CONDENSING UNITS & REFRIGERANT PIPING PROVIDED BY OWNER. ON-SITE MECHANICAL
- CONTRACTOR TO INSTALL ICE MACHINE CONDENSING UNITS & ASSOCIATED REFRIGERANT PIPING, SUPPORTS, ETC. PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

EVERYTHING SHOWN ON THIS SHEET HAS BEEN CONSTRUCTED/INSTALLED IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE JOB SITE FOR 'SITE ADAPT' CONSTRUCTION. REFER TO THE 'SITE ADAPT' DRAWINGS FOR ADDITIONAL INFORMATION.

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Leves (Description

11/14/25 PERMITSET

roject No: 61P000006.30

brawn By: EAB

checked By: ABT

MECHANICAL FLOOR PLAN (MODULAR BUILDING)

M1.0

MECHANICAL LEGEND: (NOT ALL SYMBOLS WILL BE USED ON THESE DRAWINGS)

CONSTANT VOLUME GAS-DX ROOFTOP UNIT SCHEDULE

								GEN	ERAL										ELE	ECTRICAL	DATA				DX COOLING	G COIL DAT	A			N/	ATURAL GA	AS HEATIN	G DATA		
								AIR QL	JANTITIES		SUPPLY FA	N DATA	DIMI	ENSIONS (IN	٧.)				POV	WER DATA	١					AIRS	IDE DATA					AIRSIDE	DATA		
SYMBOL	SERVICE	MANUFACTURER	MODEL	LOCATION	TYPE	TONS	SUPPLY AIRFLOW @ALT. (CFM)	RETURN AIRFLOW @ALT. (CFM)	MIN OCCUPIED OA (CFM)	ECON. OA (CFM)	RPM ESP ("W.C.)	HP	LENGTH	WIDTH HE		OPER. WEIGHT (LBS)	NOTES	VFD	VOLTAGE/ PHASE	MCA	MOCP	NOTES	SEER2/ EER2	NOMINAL TONS	NET TOTAL/ SENSIBLE CAF (MBH)	P. EAT (°F) DB/WB	LAT (°F) DB/WB	NOTES	TYPE	SEA LEVEL INPUT (MBH)	SITE OUTPUT (MBH)	EAT (°F) DB	LAT (°F) N	OTES	SYMBOL
RTU-1	BLDG	DAIKIN	DSG-048	ROOF	CV	4	1,600	1,480	120	1600	1200 0.7	1	74	49	40	600	1 THRU 11		240/1	34	50	A, B	13.7/11.8	4	46.4/36.3	76.5/63	51/50.5	A THRU E	GAS	115	91.8	66	110 A	THRU D	RTU-1
2. 3. 4.	ACCEPTAB DOWNFLO\ 14" ROOF C CONDENSE	W CONFIGURATION	NUFACTURERS INCLU	LE: CARRIER	, DAIKIN	, TRANE,	LENNOX, RHE	LEM-RUUD, YOR	K, AND ALLIED.				1					A.	TRICAL DATA N SINGLE POINT FACTORY NO	T ELECTR		ECTION.	A. B. C.	HEAT. CAPACITIES		E FOR 5300			B. C.	IL NOTES: CAPACITIE ELEVATION 5" - 10" W.C 5 STAGE HI ALUMINIZE	N. C. GAS INPL EATING.	JT RANGE		Γ	

11. UNIT PROVIDED BY MODUALL AND SHIPPED TO SITE, INSTALLED BY ONSITE CONTRACTOR. 1. WARM-UP CYCLE: THE UNIT FAN SHALL RUN CONTINUOUSLY. OUTSIDE AIR DAMPER SHALL BE CLOSED. AS THE RETURN AIR TEMPERATURE SETPOINT, THE OUTSIDE AIR DAMPER SHALL OPEN TO ITS MINIMUM POSITION AND THE RETURN AIR DAMPER SHALL CLOSE A CORRESPONDING AMOUNT.

2. HEATING-OCCUPIED CYCLE: THE UNIT FAN SHALL RUN CONTINUOUSLY. ON DEMAND FOR HEATING, THE OUTDOOR AIR DAMPER SHALL BE IN THE MINIMUM POSITION AND THE GAS FIRED HEAT EXCHANGER SHALL STAGE ON AND OFF TO MAINTAIN SPACE TEMPERATURE AT THE THERMOSTAT SETPOINT. 3. COOLING-OCCUPIED CYCLE: THE UNIT FAN SHALL RUN CONTINUOUSLY. ON DEMAND FOR COOLING, THE OUTSIDE AIR DAMPER SHALL OPEN TO THE MINIMUM POSITION THEN CYCLE ON THE ECONOMIZER CONTROL IN ACCORDANCE WITH A THERMOSTAT SENSING TEMPERATURE OF RETURN AIR TO THE UNIT. UPON A FURTHER RISE IN SPACE TEMPERATURE WITH

THE OUTDOOR AIR DAMPER OPEN 100%, THE OUTDOOR AIR DAMPER SHALL RETURN TO THE MINIMUM POSITION AND THE COMPRESSOR(S) SHALL CYCLE AS REQUIRED TO MAINTAIN SPACE TEMPERATURE AT THE THERMOSTAT SETPOINT. 4. HEATING-UNOCCUPIED CYCLE: UPON A DROP IN SPACE TEMPERATURE BELOW THE 5 DEGREE SETBACK TEMPERATURE, THE OUTDOOR AIR DAMPER SHALL BE CLOSED, THE SUPPLY FAN AND THE GAS FIRED HEAT EXCHANGER SHALL STAGE ON TO MAINTAIN SPACE TEMPERATURE. WHEN THE THERMOSTAT IS SATISFIED, THE UNIT SHALL SHUT-DOWN.

5. COOLING-UNOCCUPIED CYCLE: UPON A RISE IN SPACE TEMPERATURE ABOVE THE 5 DEGREE SETBACK TEMPERATURE, THE OUTDOOR AIR DAMPER SHALL BE CLOSED, THE SUPPLY FAN AND THE COMPRESSOR(S) SHALL CYCLE AS REQUIRED TO MAINTAIN SPACE TEMPERATURE. WHEN THE THERMOSTAT IS SATISFIED, THE UNIT SHALL SHUT DOWN.

6. TEMPERATURE SETPOINTS: HEATING OCCUPIED = 70°F, HEATING UNOCCUPIED = 55°F, COOLING UNOCCUPIED = 85°F, COOLING OCCUPIED = 75°F.

6. 2" MERV-8 FILTERS.

CONDENSATE OVERFLOW SWITCH.

9. ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF AND FAULT DETECTION DIAGNOSTICS.

8. PACKAGED RTU CONTROLS.

10. GALVANIZED STEEL DRAINPAN.

				AIR	R DATA			DIMEN	ISIONS			ELECTRICA	L	
SYMBOL	SERVICE	MANUFACTURER	MODEL	AIRFLOW (CFM)	FAN POWER (HP)	MOUNTING HEIGHT (FT.)	LENGTH (IN.)	WIDTH (IN.)	HEIGHT (IN.)	WEIGHT (LBS.)	COIL (KW)	VOLT/ PHASE	MCA	NOTES
AC-1	SERVICE AREA	AWOCO	FM-1509-M	1,177	1/2	7	36	8-5/8	10-3/8	50		120/1	3.1	1,2
AC-2	SERVICE AREA	AWOCO	FM-1509-M	1,177	1/2	7	36	8-5/8	10-3/8	50		120/1	3.1	1,2
AC-3	SERVICE AREA	AWOCO	FM-1509-M	1,177	1/2	7	36	8-5/8	10-3/8	50		120/1	3.1	1,2

						FAN SCH	HEDL	JLE						
ES	SYMBOL	SERVICE	MANUFACTURER	MODEL	FAN TYPE	CONTROL TYPE	CFM @ ALT.	STATIC PRESSURE @ ALT. (IN. W.C.)	ELECTRIC VOLT / PHASE	AL DATA HP / WATTS	DRIVE TYPE	DAMPER TYPE	APPROX. WEIGHT (LBS.)	NOTES
2	EF-1	TOILET	COOK	GC-146	CEILING MOUNTED	LIGHT SWITCH	75	0.5	115/1	70 W	DIRECT	BDD	25	1,2,3,4
2	NOTES:	PROVIDE FAN WITH U	JNIT MOUNTED SPEED	CONTROL S	WITCH.								'	

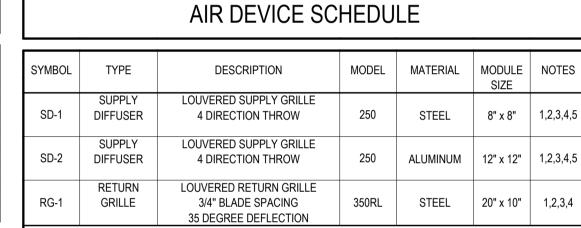
D. R-32 REFRIGERANT

E. 1 STAGE COOLING SCROLL COMPRESSOR.

2. PROVIDE NEOPRENE VIBRATION ISOLATORS. 3. PROVIDE BIRDSCREEN AT FAN TERMINATION.

4. FAN EQUIPPED WITH EC MOTOR CAPABLE OF VARIABLE SPEED CONTROL.

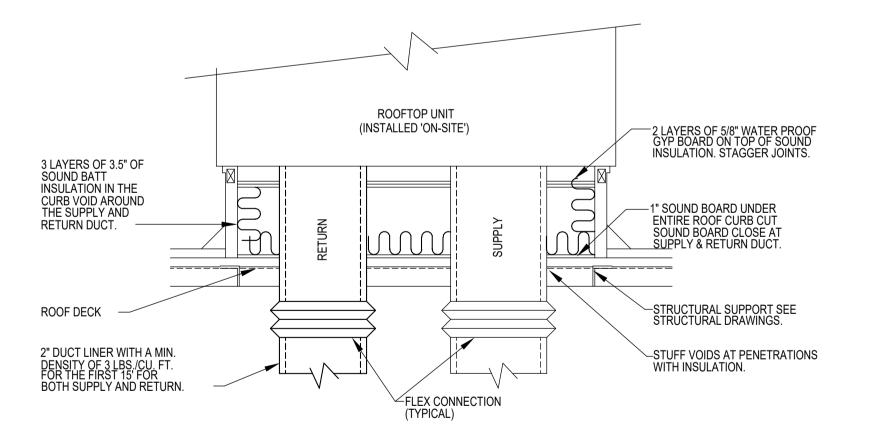
SYMBOL	MANUFACTURER	MODEL	INPUT CAPACITY	OUTPUT CAPACITY	LENGTH	ELECTRICA	L	APPROX. OPER.	NOTES	
STIVIBOL	WANDIACIONEN	WODEL	@S.L. (MBH)	@ALT. (MBH)	(FT.)	VOLT/ PHASE LOAD		WEIGHT (LBS.)	NOTES	
IR-1	SCHWANK	2312-N	23	21	2.5	24 VAC	40VA	40	1,2	
IR-2	SCHWANK	2312-N	23	21	2.5	24 VAC	40VA	40	1,2	
IR-3	SCHWANK	2312-N	23	21	2.5	24 VAC	40VA	40	1,2	
IR-4	SCHWANK	2312-N	23	21	2.5	24 VAC	40VA	40	1,2	



 EQUIPMENT SCHEDULE BASED ON TITUS. 2. ACCEPTABLE MANUFACTURERS: CARNES, KRUEGER, AND PRICE.

3. MAX NC RATING 30, PROVIDE NECESSARY FRAME AND TRIM FOR CEILING APPLICATION.

4. PROVIDE WHITE POWDER COAT PROVIDE OPPOSED BLADE DAMPER.



--- MAIN TRUNK DUCT

-TRANSITION TO

ROUND DUCT

RETURN **EXHAUST**

TYPICAL BRANCH CONNECTION DETAIL

\ ROOFTOP CURB DETAIL

SUPPLY OUTDOOR

45° ENTRY CLINCHED

COLLAR WITH GASKET

- WHEN POSSIBLE

BRANCH DUCT

SCALE: NTS

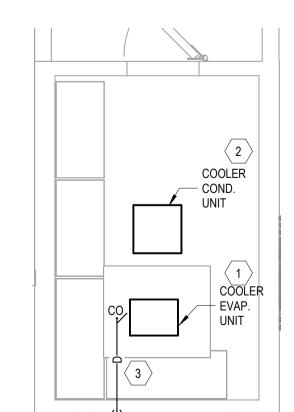


1. RUSSELL MODEL RL6AII7ADA EVAPORATOR UNIT (INSIDE COOLER). INSTALLED AT MODUALL.

2. RUSSELL MODEL RF0I50E4SDANT CONDENSING UNIT (ON ROOF). INSTALLED AT MODUALL. SYSTEM SHALL MEET INTERNATIONAL ENERGY CODE EFFICIENCY REQUIREMENTS.

3. CONDENSATE PIPING INSTALLED AT MODUALL.

COOLER HAS BEEN COMPLETELY CONSTRUCTED IN A CONTROLLED ENVIRONMENT AND WILL BE SHIPPED TO THE JOB SITE. MECHANICAL EQUIPMENT IS INSTALLED, REFRIGERANT PIPING IS INSTALLED AND CHARGED, AND THE CONDENSATE PIPING IS INSTALLED.



MECHANICAL COOLER PLAN

PANDUIT STRAP OVER CORE (TYP.) SUPPLY AIR BRANCH DUCT WITH LINED INSULATION TRUNK DUCT WITH LINED SUPPORT FROM STRUCTURE ABOVE. INSULATION SQUARE-TO-ROUND ADAPTER (IF REQUIRED). EXTERNALLY INSULATE BACK OF DIFFUSER BODY. SEAL AIR TIGHT. SUPPLY DIFFUSER

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BLVD E, NEW 2122 CARLISLE BI ALBUQUERQUE, N

Date 11/14/25	Issue/Description PERMIT SET

61P000006.30 Drawn By: Checked By:

MECHANICAL SCHEDULES & DETAILS (MODULAR BUILDING)

MECHANICAL KEY NOTES: (#)

TEE/PLUG FOR CLEANOUT——

DRAIN SIZE —

3"MINIMUM ——

3"MINIMUM ———

REFER TO PLANS FOR

RTU CONDENSATE DETAIL
SCALE: NTS

- 1. RTU PROVIDED & SHIPPED BY MODUALL MFG. M.C. TO INSTALL RTU ON ROOF CURB & SECURE RTU TO ROOF CURB - INSTALLATION PER MANUFACTURER'S INSTRUCTIONS. EXTEND SUPPLY & RETURN AIR DUCT FROM RTU TO DUCTWORK INSTALLED IN MODULAR BUILDING. REFER TO MODULAR BUILDING DRAWINGS FOR ADDITIONAL INFORMATION.
- 2. ICE MAKER CONDENSING UNIT PROVIDED BY OWNER, INSTALLED BY 'ON-SITE' CONTRACTOR INSTALL ON ROOF PER MANUFACTURER'S INSTRUCTIONS. ALL REFRIGERANT PIPING PROVIDED BY OWNER & INSTALLED BY 'ON-SITE' CONTRACTOR. COORDINATE MOUNTING LOCATION AND SCREENING DIMENSIONS WITH CONDENSING UNIT CLEARANCE REQUIREMENTS. CONDENSING UNIT SHALL NOT DISCHARGE AIR TOWARDS RTU AIR INTAKE.
- 3. CONNECT NEW 3/4" CONDENSATE TO RTU (PER MANUFACTURER'S INSTRUCTIONS). EXTEND TO NEAREST ROOF SCUPPER - PROVIDE PIPING SUPPORTS EVERY 10'-0" O.C. & EACH CHANGE OF DIRECTION. REFER TO DETAIL FOR ADDITIONAL INFORMATION.
- 4. INFRARED HEATER (IR) PROVIDED BY OWNER, INSTALLED BY 'ON-SITE' CONTRACTOR. INSTALL PER MANUFACTURER'S INSTRUCTIONS. COORDINATE ACTUAL LOCATION WITH OWNER PRIOR TO INSTALLATION. ANY FLUE TERMINATIONS SHALL BE 10'-0" FROM RTU AIR INTAKE. COORDINATE ELECTRICAL CONNECTION AND 120V/24V TRANSFORMER WITH E.C.

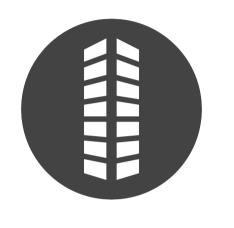
'ON-SITE' CONTRACTOR TO INSTALL ALL MECHANICAL EQUIPMENT SHIPPED BY MODUALL & ALL EQUIPMENT PROVIDED BY OWNER. THIS INCLUDES DUCTWORK CONNECTIONS TO RTU, CONDENSATE PIPING, REFRIGERANT PIPING, SUPPORTS, CONTROLS, INSULATION, ETC AS REQUIRED FOR A FULLY OPERATIONAL & COMPLETED MECHANICAL SYSTEM.

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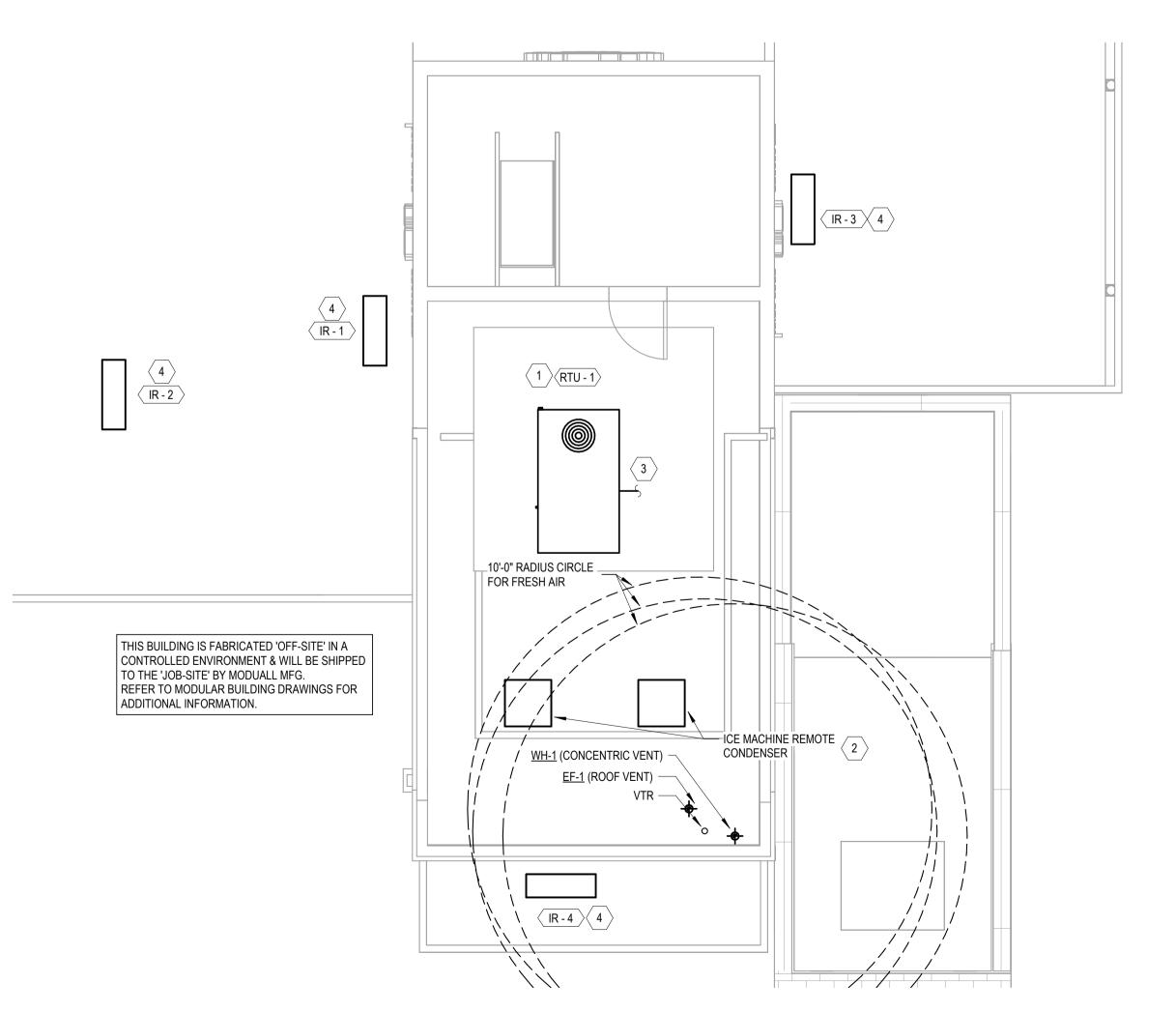
2122 CARLISLE BLVD ALBUQUERQUE, NEW

# Date 11/14/25	Issue/Description PERMIT SET

- HVAC UNIT

Project No:	61P000006.30
Drawn By:	EAB
Checked By:	ABT

MECHANICAL SITE PLAN (SITE



11/11/2025 9:39:59 AM

15A: GENERAL

15A 1-1 GENERAL REQUIREMENTS

REQUIREMENTS UNDER DIVISION ONE AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THESE SPECIFICATIONS SHALL BE A PART OF THIS SECTION. CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH ITS CONTENTS AS TO REQUIREMENTS THAT AFFECT THIS DIVISION OR SECTION. THE WORK REQUIRED UNDER THIS SECTION INCLUDES MATERIAL, EQUIPMENT, APPLIANCES, TRANSPORTATION, SERVICES, AND LABOR REQUIRED TO COMPLETE THE ENTIRE SYSTEM AS REQUIRED BY DRAWINGS AND SPECIFICATIONS.

THE SPECIFICATIONS AND DRAWINGS FOR THE PROJECT ARE COMPLEMENTARY, AND PORTIONS OF THE WORK DESCRIBED IN ONE SHALL BE PROVIDED AS IF DESCRIBED IN BOTH. IN THE EVENT OF DISCREPANCIES, NOTIFY THE ENGINEER AND/OR OWNER AND REQUEST CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK

15A 1-2 INSPECTION OF SITE

PRIOR TO SUBMITTING BID, VISIT THE SITE OF THE PROPOSED WORK AND BECOME FULLY INFORMED AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. FAILURE TO DO SO WILL NOT BE CONSIDERED SUFFICIENT JUSTIFICATION TO REQUEST OR OBTAIN EXTRA COMPENSATION OVER AND ABOVE THE CONTRACT

15A 1-3 MATERIAL AND WORKMANSHIP

PROVIDE NEW MATERIAL, EQUIPMENT, AND APPARATUS UNDER THIS CONTRACT UNLESS OTHERWISE STATED HEREIN, OF BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE, AND FREE FROM ANY DEFECTS. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT NECESSARILY INTENDED TO DESIGNATE THE REQUIRED TRIM, WRITTEN DESCRIPTION OF THE OF THE TRIM GOVERN MODEL NUMBERS.

WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE A NEAT AND "WORKMANLIKE" APPEARANCE WHEN COMPLETED, TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER. WORKMANSHIP SHALL BE THE FINEST POSSIBLE BY EXPERIENCED MECHANICS. INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES AND LAWS.

THE COMPLETE INSTALLATION SHALL FUNCTION AS DESIGNED AND INTENDED WITH RESPECT TO EFFICIENCY, CAPACITY, NOISE LEVEL, ECT. ABNORMAL NOISE CAUSED BY BY RATTLING EQUIPMENT, PIPING, DUCTS, AIR DEVICES, AND SQUEAKS IN MOVING COMPONENTS WILL NOT BE ACCEPTABLE. IN GENERAL, MATERIALS AND EQUIPMENT SHALL BE OF COMMERCIAL SPECIFICATION GRADE IN QUALITY. LIGHT DUTY AND RESIDENTIAL TYPE EQUIPMENT WILL NOT BE ACCEPTED.

REMOVE FROM THE PREMISES WASTE MATERIAL PRESENT AS A RESULT OF WORK, INCLUDING CARTONS, CRATING, PAPER, AND STICKERS, ETC. CLEAN EQUIPMENT INSTALLED UNDER THIS CONTRACT TO PRESENT A NEAT AND CLEAN INSTALLATION AT THE TERMINATION OF THE WORK.

REPAIR OR REPLACE PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT TO THE SATISFACTION OF AUTHORITIES AND REGULATIONS HAVING JURISDICTION.

15A 1-4 COORDINATION

COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT THE VARIOUS COMPONENTS OF THE SYSTEMS WIL BE INSTALLED AT THE PROPER TIME, WILL FIT THE AVAILABLE SPACE, AND WILL ALLOW PROPER SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.

UNLESS OTHERWISE INDICATED, THE GENERAL CONTRACTOR WILL PROVIDE CHASES AND OPENINGS IN BUILDING CONSTRUCTION REQUIRED FOR INSTALLATION OF THE SYSTEMS SPECIFIED HEREIN. CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE BUILDING, AS VARIATIONS MAY OCCUR. CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS THAT COULD HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.

PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF CEILING, WALL, OR FLOOR FINISHES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT INTENDED TO DESIGNATE THE REQUIRED TRIM.

15A 1-5 ORDINANCES AND CODES

WORK PERFORMED UNDER THIS CONTRACT SHALL, AT MINIMUM, BE IN CONFORMANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES HAVING JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INSTALLATION WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ANY AMENDMENTS AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), UNDERWRITERS LABORATORIES (UL), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS (ASHRAE), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) AND OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE. WHERE THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THERE REFERENCED CODES, STANDARDS, ETC., THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE.

PROCURE AND PAY FOR PERMITS AND LICENSES REQUIRED FOR THE ACCOMPLISHMENT OF THE WORK HEREIN DESCRIBED. WHEREREQUIRED, OBTAIN, PAY FOR AND FURNISH CERTIFICATES OF INSPECTION TO OWNER. CONTRACTOR WILL BE HELD RESPONSIBLE FOR VIOLATIONS OF THE LAW.

15A 1-6 PROTECTION OF EQUIPMENT AND MATERIALS

STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS DELIVERED TO JOB SITE. COVER WITH WATERPROOF, TEAR-RESISTANT, HEAVY TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER, DIRT, PAINT, WATER, OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT HAS BEEN DAMAGED BY CONSTRUCTION ACTIVATES WILL BE REJECTED, AND CONTRACTOR IS OBLIGATED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A LIKE KIND.

KEEP PREMISES ROOM CLEAN FROM FOREIGN MATERIAL CREATED DURING WORK PERFORMED UNDER THIS CONTRACT. PIPING, EQUIPMENT, ETC., SHALL HAVE A NEAT AND CLEAN APPEARANCE AT THE TERMINATION OF

PLUG OR CAP OPEN ENDS OF DUCTWORK AND PIPING SYSTEMS WHILE STORED OR INSTALLED DURING CONSTRUCTION WHEN NOT IN USE TO PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS.

KEEP THE MANUFACTURER PROVIDED PROTECTIVE COVERING ON FLOOR DRAINS, FLOOR SINKS, AND TRENCH DRAINS DURING CONSTRUCTION. REMOVE COVERINGS AT THE TERMINATION OF THE WORK AND POLISH EXPOSED SURFACES.

15A 1-7 OPERATION AND MAINTENANCE INSTRUCTIONS

COLLECT AND COMPILE A COMPLETE BROCHURE OF FIXTURES, MATERIALS, AND EQUIPMENT FURNISHED AND INSTALLED ON THIS PROJECT. INCLUDE OPERATIONAL AND MAINTENANCE INSTRUCTIONS, MANUFACTURER'S CATALOG SHEETS, WIRING DIAGRAMS, PARTS LISTS, APPROVED SHOP DRAWINGS, AND DESCRIPTIVE LITERATURE FURNISHED BY THE MANUFACTURER. INCLUDE AN INSIDE COVER SHEET THAT LISTS THE PROJECT NAME, DATE, OWNER, ARCHITECT, ENGINEER, GENERAL CONTRACTOR, SUBCONTRACTOR, AND AN INDEX OF

SUBMIT COPIES OF LITERATURE BOUND IN APPROVED BINDERS TO THE ARCHITECT AND OWNER AT THE TERMINATION OF THE WORK. PAPER CLIPS, STAPLES, RUBBER BANDS, AND MAILING ENVELOPES ARE NOT CONSIDERED APPROVED BINDERS. FINAL APPROVAL OF PLUMBING SYSTEMS WILL BE WITHHELD UNTIL THIS EQUIPMENT BROCHURE IS DEEMED COMPLETE BY THE ARCHITECT, ENGINEER, AND OWNER.

15A 1-8 WARRANTIES

WARRANT EACH SYSTEM AND EACH ELEMENT THEREOF AGAINST ALL DEFECTS DUE TO FAULTY WORKMANSHIP, DESIGN OR MATERIAL FOR A PERIOD OF 12 MONTHS FROM DATE OF SUBSTANTIAL COMPLETION, UNLESS SPECIFIC ITEMS ARE NOTED TO CARRY A LONGER WARRANTY IN THE CONSTRUCTION DOCUMENTS OR MANUFACTURER'S STANDARD WARRANTY EXCEEDS 12 MONTHS. REMEDY ALL DEFECTS, OCCURRING WITHIN THE WARRANTY PERIOD(S) STATED IN THE GENERAL CONDITIONS AND DIVISION 1.

WARRANTIES SHALL INCLUDE LABOR AND MATERIAL. MAKE REPAIRS OR REPLACEMENTS WITHOUT ANY ADDITIONAL COST TO THE OWNER.

PERFORM THE REMEDIAL WORK PROMPTLY, UPON WRITTEN NOTICE FROM THE ENGINEER OR OWNER.

AT THE TIME OF SUBSTANTIAL COMPLETION, DELIVER TO THE OWNER ALL WARRANTIES, IN WRITING AND PROPERLY EXECUTED, INCLUDING TERM LIMITS FOR WARRANTIES EXTENDING BEYOND THE ONE YEAR PERIOD, EACH WARRANTY INSTRUMENT BEING ADDRESSED TO THE OWNER AND STATING THE COMMENCEMENT DATE AND TERM.

15A 1-9 CUTTING AND PATCHING

PERFORM CUTTING OF WALLS, FLOORS, CEILINGS, ETC. AS REQUIRED TO INSTALL WORK UNDER THIS SECTION. OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO CUTTING. DO NOT CUT OR DISTURB STRUCTURAL MEMBERS WITHOUT PRIOR APPROVAL FROM THE ARCHITECT. CUT HOLES AS SMALL AS POSSIBLE. GENERAL CONTRACTOR SHALL PATCH WALLS, FLOORS, ETC. AS REQUIRED BY WORK UNDER THIS SECTION. PATCHING SHALL MATCH THE ORIGINAL MATERIAL AND CONSTRUCTION. REPAIR AND REFINISH AREAS DISTURBED BY WORK TO THE CONDITION OF ADJOINING SURFACES IN A MANNER SATISFACTORY TO THE ARCHITECT.

15A 1-10 ROUGH-IN

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COORDINATE WITHOUT DELAY ROUGHING-IN WITH GENERAL CONSTRUCTION. CONCEAL PIPING AND CONDUIT ROUGH-IN

15A 1-11 STRUCTURAL STEEL

STRUCTURAL STEEL USED FOR PIPE SUPPORTS, EQUIPMENT SUPPORTS, ETC., SHALL BE NEW, CLEAN, AND CONFORM TO ASTM DESIGNATION A-36.

SUPPORT PLUMBING AND MECHANICAL EQUIPMENT AND PIPING FROM THE BUILDING STRUCTURE. DO NOT SUPPORT PLUMBING EQUIPMENT FORM CEILINGS, OTHER MECHANICAL OR ELECTRICAL COMPONENTS, AND OTHER NON-STRUCTURAL ELEMENTS.

15A 1-12 ACCESS DOORS

PROVIDE ACCESS DOORS IN CEILING AND WALLS WHERE INDICATED OR REQUIRED FOR ACCESS TO CONCEALED VALVES AND EQUIPMENT INSTALLED UNDER THIS SECTION. PROVIDE CONCEALED HINGES, SCREWDRIVER-TYPE LOCK, ANCHOR STRAPS MANUFACTURED BY MILCOR, ZURN, TITUS, OR EQUAL. OBTAIN ARCHITECT'S APPROVAL OF TYPE, SIZE, LOCATION, AND COLOR BEFORE ORDERING.

15A 1-13 PENETRATIONS

SEAL FLOOR, EXTERIOR WALL, AND ROOF PENETRATIONS WATER AND WEATHERTIGHT WITH APPROPRIATE NON-SHRINK, NON-HARDENING COMMERCIAL CONSTRUCTION SEALANT. SEAL ROOF PENETRATIONS WITH 4 POUND PER SQUARE FOOT LEAD FLASHING. PROVIDE A SLEEVE, AND SEAL NON-FIRE-RATED FLOOR AND WALL PENETRATIONS WITH FIBERGLASS PACKING ND SILICONE CAULK (FOR ACOUSTICAL INSULATION).

COORDINATE FIRE RATING REQUIREMENTS AND LOCATIONS WITH THE ARCHITECT. SEAL PENETRATIONS OF FIRE-RATED ASSEMBLIES WITH 3M CP-25 FIRE BARRIER CAULK (PROVIDE THICKNESS AND METHOD AS REQUIRED AND RECOMMENDED BY MANUFACTURER) TO MAINTAIN THE FIRE RESISTANCE RATING OF FIRE-RATED ASSEMBLIES.

SEAL EXTERIOR WALL PENETRATIONS BELOW GRADE WITH CAST IRON WALL PIPES AND MODULAR MECHANICAL SLEEVE SEALS, MANUFACTURED BY THUNDERLINE/LINK SEAL, CALPICO, INC AND METRAFLEX.

PROVIDE SLEEVES FOR HORIZONTAL PIPE PASSING THROUGH OR UNDER FOUNDATION. SLEEVES SHALL BE CAST IRON SOIL PIPE TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED.

PROVIDE SLEEVES FOR VERTICAL PIPE PASSING THROUGH SLAB ON GRADE, SLEEVES SHALL BE SCHEDULE 40 PVC PIPE, TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED. SEAL WATER-TIGHT WITH SILICONE CAULK.

15B: HEATING, VENTILATION, AND AIR CONDITIONING.

15B 1-1 DUCTWORK

ALL DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS CORRESPONDING TO THE SYSTEM PRESSURE. DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR A TWO-INCH PRESSURE RATING AND SEAL CLASS B.

SUPPLY AND RETURN DUCTWORK INSIDE THE BUILDING SHALL BE INSULATED WITH A MINIMUM R-6 ACOUSTICAL LINING OR EXTERNALLY WRAPPED WITH GLASS FIBER DUCT WRAP. INSULATE SUPPLY AND RETURN DUCTWORK LOCATED OUTSIDE THE BUILDING WITH R-12 LINER AND SEAL SEAMS WEATHER TIGHT.

FLEXIBLE DUCTWORK MAINS ARE NOT PERMITTED. PROVIDE MAXIMUM 5'-0" FLEXIBLE DUCT CONNECTIONS TO CEILING DIFFUSERS.

FURNISH AND INSTALL VOLUME/BALANCE DAMPERS AT ALL BRANCH DUCTS TO DIFFUSERS. LOCATE DAMPERS A MINIMUM OF 4'-0" AWAY FROM DIFFUSERS.

INSTALL VTR'S EXHAUST FANS, AND FLUES A MINIMUM OF 5'-0" FROM PARAPET OR OUTSIDE WALL AND 10'-0" MINIMUM FROM EQUIPMENT WITH OUTSIDE AIR INTAKE.

15B 1-2 ELECTRICAL WIRING

LINE VOLTAGE WIRING SHALL BE FURNISHED BY DIVISION 16. LINE VOLTAGE CONTROL AND INTERLOCK WIRING FOR MECHANICAL SYSTEMS SHALL ALSO BE FURNISHED BY DIVISION 16 CONTRACTOR. LOW VOLTAGE CONTROL WIRING SHALL BE BY THE DIVISION 15 CONTRACTOR. PROVIDE WIRING DIAGRAMS TO THE DIVISION 16 CONTRACTOR AS REQUIRED FOR PROPER EQUIPMENT HOOKUP. COORDINATE WITH THE DIVISION 16 CONTRACTOR THE ACTUAL WIRE SIZING AMPS FOR MECHANICAL EQUIPMENT (FROM THE EQUIPMENT NAMEPLATE) TO ENSURE PROPER INSTALLATION.

ALL TEMPERATURE SENSORS, FAN SWITCHES, AND SPEED CONTROLS SHALL BE INSTALLED 48" ABOVE THE FLOOR FOR ADA REQUIREMENTS.

15B 1-3 FINAL TESTING AND ADJUSTMENTS

AIR BALANCE SHALL BE PERFORMED BY AN INDEPENDENT AIR BALANCE CONTRACTOR. BALANCE EACH SUPPLY, RETURN, AND OUTSIDE AIR DEVICE WITHIN 5% OF REQUIREMENTS AND FURNISH A REPORT TO THE CONSTRUCTION MANAGER,. THE ENTIRE HVAC SYSTEM MUST BE FULLY OPERABLE, BALANCED, AND APPROVED BY OWNER'S REPRESENTATIVE ON THE DAY TENANT OPENS FOR BUSINESS.

ADJUST THERMOSTATS AND CONTROL DEVICES TO OPERATE AS INTENDED. ADJUST BURNERS, PUMPS, FANS, ETC. FOR PROPER AND EFFICIENT OPERATION. CERTIFY TO ARCHITECT THAT ADJUSTMENTS HAVE BEEN MADE AND THAT SYSTEM IS OPERATING SATISFACTORILY. CALIBRATE, SET AND ADJUST AUTOMATIC TEMPERATURE CONTROLS. CHECK PROPER SEQUENCING OF INTERLOCK SYSTEMS, AND OPERATION OF SAFETY CONTROLS.

15C 1-4 SYSTEM TESTING AND ADJUSTING

UPON COMPLETION OF EACH PHASE OF THE INSTALLATION, TEST EACH SYSTEM IN CONFORMANCE WITH LOCAL CODE REQUIREMENTS AND LANDLORD CRITERIA. FURNISH LABOR AND EQUIPMENT REQUIRED TO TEST PLUMBING WORK INSTALLED UNDER THIS CONTRACT, AND ASSUME COST INVOLVED IN MAKING THE TESTS, AND REPAIRING AND/OR REPLACING DAMAGE RESULTING THERE FROM.

NOTIFY THE ARCHITECT AND THE AUTHORITY HAVING JURISDICTION, THREE (3) WORKING DAYS PRIOR TO MAKING PLUMBING SYSTEM TEST. LEAVE CONCEALED WORK UNCOVERED UNTIL THE REQUIRED TEST HAVE BEEN COMPLETED, BUT IF NECESSARY DUE TO CONSTRUCTION PROCEDURE, TEST ON PORTIONS OF THE WORK MAY BE MADE, AND WHEN SATISFACTORY, THE WORK MAY BE CONCEALED. TEST PIPING BEFORE INSULATION IS INSTALLED, AND BEFORE BACKFILL. PIPES, JOINTS, FLANGES, VALVE STEMS, ETC. SHALL BE LEAK TIGHT. REPAIR OR REPLACE SYSTEM DEFECTS WITH NEW MATERIALS. CAULKING OF DEFECTIVE JOINTS, CRACKS OR HOLES WILL NOT BE PERMITTED. REPEAT TEST AFTER DEFECTS HAVE BEEN ELIMINATED. MAKE TESTS IN THE PRESENCE OF THE ADMINISTRATIVE AUTHORITY AND/OR THE OWNER'S AUTHORIZED REPRESENTATIVE.

15C 1-5 GUARANTEE

THE WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL INCLUDE THE FURNISHING, INSTALLATION, AND CONNECTION OF PLUMBING SYSTEMS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. BY SIGNING THE CONTRACT, THE CONTRACTOR ACKNOWLEDGES THAT HE HAS ACQUAINTED HIMSELF WITH THE SITE AND THE EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, AND THE DRAWINGS AND SPECIFICATIONS PERTAINING THERETO, AND HE INDICATES THAT HE WILL COMPLY WITH THE REQUIREMENTS AND INTENT OF PERTINENT DOCUMENTS IN THE PERFORMANCE OF THE WORK.

GUARANTEE THAT THE PLUMBING INSTALLED UNDER THIS CONTRACT IS FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ON (1) YEAR FROM THE DATE OF JOB ACCEPTANCE BY THE OWNER. THIS SHALL INCLUDE A GUARANTEE OF FREE CIRCULATION OF LIQUIDS THROUGHOUT THE SYSTEM AS INTENDED WITHOUT LEAKS, EXCESSIVE NOISE, OR WATER HAMMER.

IF DEFECTS OCCUR DURING THE ONE YEAR GUARANTEE PERIOD, REPAIR OR REPLACE SUCH DEFECTS AT NO EXPENSE TO THE OWNER, AND TO THE SATISFACTION OF THE OWNER, ARCHITECT AND ENGINEER.

HVAC GENERAL NOTES:

- 1. PLANS ARE SCHEMATIC IN NATURE & INTENDED TO DEPICT GENERAL SCOPE OF PROJECT. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION AND COORDINATE WITH OTHER TRADES PRIOR TO INSTALLATION. ALL WORK SHALL BE CLOSELY COORDINATED WITH G.C. PRIOR TO PURCHASE. FABRICATION & INSTALLATION.
- 2. CONSTRUCTION PER ALL APPLICABLE CODES & STANDARDS. CODES GOVERN UPON ANY DISCREPANCIES WITH THE PLANS.
- 3. ALL MATERIAL AND EQUIPMENT SHALL BE NEW AND OF THE BEST QUALITY, AND BE PRODUCED BY
- REPUTABLE MANUFACTURER'S USED IN COMMERCIAL CONSTRUCTION.

4. SUBMIT OPERATION AND MAINTENANCE MANUALS TO GC UPON COMPLETION OF PROJECT.

- 5. PROVIDE GUARANTEE ON ALL EQUIPMENT, MATERIAL AND WORKMANSHIP FOR ONE YEAR UPON COMPLETION OF PROJECT. ANY DEFECTS ARISING WITHIN ONE YEAR SHALL BE REPAIRED OR REPLACED AT NO COST TO THE OWNER.
- 6. TEST ALL PIPING IN ACCORDANCE WITH LOCAL CODES AND STANDARDS.
- 7. PROJECT LOCATED IN CLIMATE ZONE 4B (ASHRAE STANDARD 90.1 ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS). ALL ROUND DUCTWORK SHALL BE WRAPPED & ALL RECT./SQ. DUCTWORK SHALL BE LINED ('CERTAIN-TEED', 'OWENS-CORNING' OR ENGINEER APPROVED EQUAL) AS FOLLOWS (COORDINATE ACTUAL LOCATION OF DUCT & BUILDING INSULATION TYPE WITH G.C.):

DUCT LOCATION	SUPPLY DUCT	RETURN DUCT
VENTILATED ATTIC	R-6	R-6
UNVENTED ATTIC ABV. INSULATED CLG.	R-6	R-6
UNVENTED ATTIC WITH ROOF ISULATION	R-6	R-6
UNCONDITIONED SPACE	R-6	R-6
INDIRECTLY CONDITIONED	R-6	NONE*
CONDITIONED SPACE	NONE	NONE*

*RA DUCT SHALL HAVE 1/2" DUCT LINER (MIN.)

- UNLESS LOCATED IN 'CONDITIONED SPACE' EXHAUST DUCT SHALL HAVE MINUMUM R- VALUE OF R-3.5
- 8. DUCTWORK SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS -ADJUST FOR LINER AS REQUIRED.
- 9. SIX FOOT (max.) ALLOWED FOR FLEX DUCT (ABOVE ACCESSIBLE CEILINGS ONLY). FLEX DUCT SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS & AS PER THE RATED/LISTED APPLICATION.

10. ALL DUCT SHALL BE SEALED WITH HARDCAST DT TAPE WITH FTA ADHESIVE OR HARDCAST SFG-1402 (FOIL

- GRIP) TAPE OR ENGINEER APPROVED EQUAL. EXPOSED DUCTWORK (IN CONDITIONED SPACE) DOES NOT REQUIRE TO BE SEALED.
- 11. MAINTAIN A MINIMUM OF 10' BETWEEN FRESH AIR INTAKE AND EXHAUST/ VENT TERMINATIONS. WHERE THEY ARE WITHIN 10', FRESH AIR INTAKE SHALL BE LOCATED 2' (min.) BELOW EXHAUST/VENT TERMINATION. FIELD VERIFY ACTUAL REQUIREMENTS PRIOR TO ROUGH-IN.
- 12. ACTUAL LOCATION OF MECHANICAL EQUIPMENT & DEVICES PER G.C. COORDINATE PRIOR TO ROUGH-IN.
- 13. PROVIDE DUCT TRANSITIONS AS REQUIRED TO MAKE CONNECTION TO MECHANICAL EQUIPMENT & DEVICES USED. ALL DUCTS SHALL BE CONSTRUCTED & INSTALLED PER SMACNA STANDARDS.
- 14. PROVIDE MECHANICAL EQUIPMENT WITH PROGRAMMABLE THERMOSTAT WITH AUTO CHANGEOVER (WHITE-ROGERS, HONEYWELL OR APPROVED EQUAL). LOW VOLTAGE CONTROL WIRING FOR MECHANICAL EQUIPMENT BY M.C. COORDINATE ACTUAL LOCATION WITH FURNITURE & G.C. PRIOR TO ROUGH-IN. OWNER SHALL APPROVE THERMOSTAT PRIOR TO PURCHASE.
- 15. DO NOT ROUTE ANY PIPING OR DUCTWORK ABOVE ELECTRICAL PANELS, TRANSFORMERS & EQUIPMENT COORDINATE WITH E.C.
- 16. FURNISH AND INSTALL ALL GALVANIZED STEEL DUCTWORK AND HOUSINGS AS SHOWN ON DRAWINGS. ALL DUCTWORK SHALL BE IN CONFORMANCE WITH CURRENT SMACNA STANDARDS RELATIVE TO GAUGE, BRACING, JOINTS, ETC. SUPPORT HORIZONTAL RUNS OF DUCT FROM STRAP IRON HANGERS ON CENTERS NOT TO EXCEED 8'-0". DO NOT SUPPORT CEILING GRID, CONDUITS, PIPES, EQUIPMENT, ETC. FROM DUCTWORK.
- 17. ALL EXTERIOR PENETRATIONS SHALL BE SEALED WEATHERTIGHT. FIELD VERIFY ACTUAL REQUIREMENTS.
- 18. PROVIDE ACCESS & CLEARANCES TO MECHANICAL EQUIPMENT & DEVICES AS REQUIRED BY
- a) DUCT MATERIALS SHALL BE AS FOLLOWS:

MANUFACTURER & CODE - FIELD VERIFY.

- b) RECTANGULAR DUCTWORK SHALL BE ASTM G90 GALVANIZED STEEL: ASTM A525, LOCK-FORMING QUALITY, 1.25 OZ. ZINC COATED EACH SIDE.
- c) ROUND RIGID DUCTWORK SNAP-LOCK PIPE WITH TRANSVERSE JOINTS TAPED.
- d) ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS, MANUAL 15d. ALL SUPPLY AIR DUCT PRESSURE SHALL BE THE SAME AS THE EXTERNAL STATIC PRESSURE (ESP) OF THE EQUIPMENT SUPPLYING THE DUCT. THE EQUIPMENT (ESP) SHALL BE THE PRESSURE CLASS FOR THE ENTIRE SUPPLY DUCT SYSTEM.
- 20. G.C. SHALL PROVIDE GUARDS FOR MECHANICAL EQUIPMENT THAT REQUIRE SERVICE THAT ARE LOCATED WITHIN 10' OF A ROOF EDGE OR OPENING LOCATED MORE THAN 30" ABOVE FLOOR ROOF OR GRADE. GUARD LOCATION & CONSTRUCTION PER IMC & IBC. FIELD VERIFY ACTUAL REQUIREMENTS & COORDINATE WITH G.C. PRIOR TO START OF CONSTRUCTION.
- 21. M.C. SHALL PAINT (FLAT BLACK) INSIDE OF CHASES, DUCTWORK, GRILLES AND/OR DIFFUSERS THAT ARE VISIBLE THROUGH THE FACE OF GRILLES & DIFFUSERS FIELD VERIFY.
- 22. UNLESS OTHERWISE NOTED, BRANCH DUCTWORK (DUCT RUNOUT SIZE) TO AIR OUTLETS SHALL BE SAME SIZE AS OUTLET NECK SIZE.

Galloway

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 Project No:
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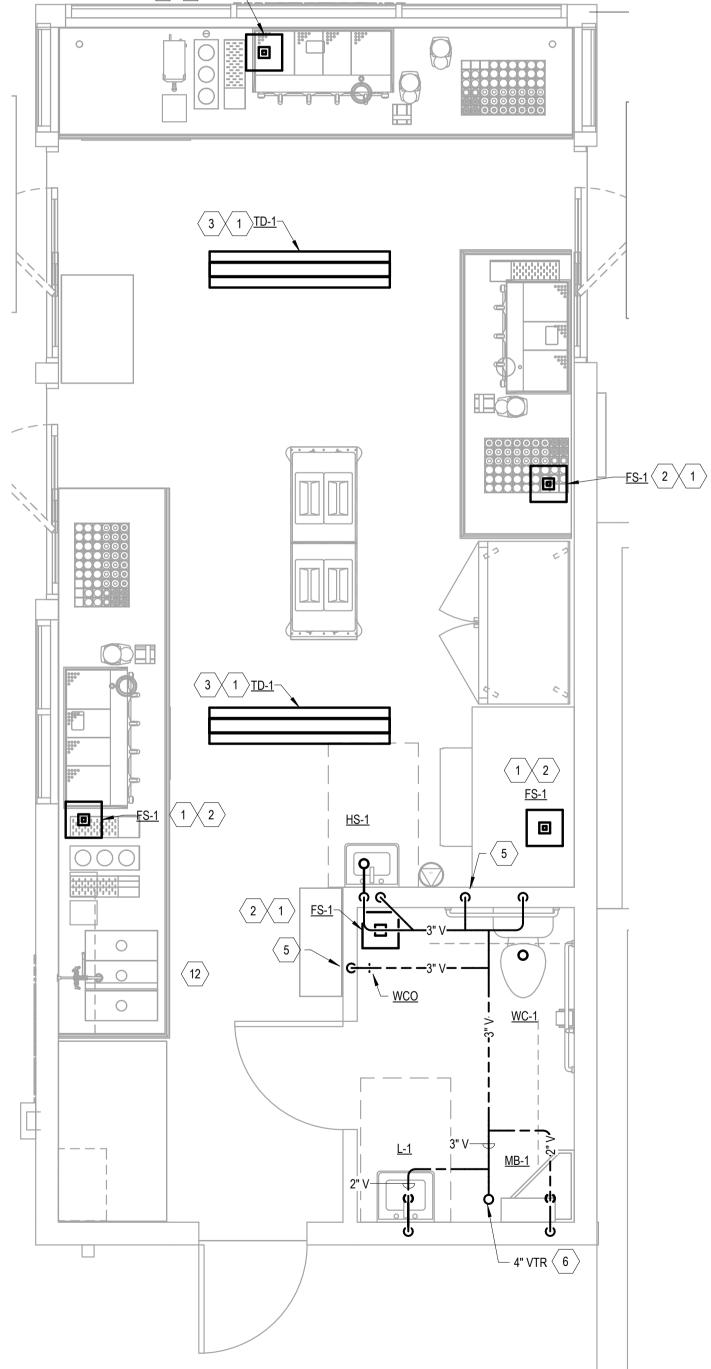
 Drawn By:
 EAB

 Checked By:
 ABT

MECHANICAL SPECIFICATIONS

M4.0

B PLUMBING FLOOR PLAN - DOMESTIC WATER
SCALE: 3/8" = 1'-0"



PLUMBING KEY NOTES: (#)

- 1. PROVIDE PLUMBING 'ROUGH-IN' FOR PLUMBING FIXTURE PIPING SHALL BE TERMINATED 4" BELOW FLOOR FOR FUTURE 'ON-SITE' CONNECTION. REFER TO PLUMBING FIXTURE SCHEDULE FOR LINE SIZE SERVING
- 2. FS-1: 12"x12" FLOOR SINK W/ 3/4 GRATE (BY MODUALL).
- 3. TD-1: 11"x60" TRENCH DRAIN (BY MODUALL).
- 4. NOTE NOT USED RESERVED FOR VERSION #3 ICE MAKER LOCATION.
- 5. VENT PIPING SHALL BE TERMINATED 4" BELOW FLOOR FOR FUTURE 'ON-SITE' CONNECTION. ROUTE VENT PIPING UP FROM BELOW FLOOR TO ABOVE CEILING AS SHOWN.
- 6. 4" VTR THIS AREA MAINTAIN 10'-0" (MIN.) FROM FRESH AIR INTAKE OF RTU (RTU INSTALLED BY 'ON-SITE'
- 7. DOMESTIC WATER SERVICE THIS AREA TO BE INSTALLED BY ONSITE PC. REFER TO DOMESTIC WATER ONE-LINE DIAGRAM & 'SITE ADAPT' PLANS FOR ADDITIONAL INFORMATION.
- 8. FUTURE LOCATION OF WATER FILTRATION SYSTEM (PROVIDED & INSTALLED BY OTHERS) DO NOT INSTALL ANY DOMESTIC WATER PIPING IN THIS AREA PRIOR TO COORDINATION WITH WATER FILTRATION SYSTEM INSTALLATION REQUIREMENTS.
- 9. GAS-FIRED, TANKLESS HEATER ABOVE MOP BASIN REFER TO DETAIL. EXTEND & TERMINATE CONCENTRIC VENT THRU ROOF.
- 10. 1/2" CW, HW & FW DOWN INTERIOR FACE OF WALL TERMINATE BELOW COUNTER FOR CONNECTION ONSITE BY OTHERS.
- 11. DOMESTIC WATER PIPING LOCATED WITHIN INTERNAL WALL.
- 12. ROUTE EACH DRAIN FROM 3 COMPARTMENT SINK INDEPENDENTLY TO ADJACENT FLOOR SINK AND DRAIN INDIRECTLY VIA AIRGAP.

ONSITE PLUMBING CONTRACTOR NOTES

- 1. ON-SITE PLUMBING CONTRACTOR TO PROVIDE & INSTALL ALL OF THE DOMESTIC WATER, GREASE WASTE, SANITARY WASTE & VENT PIPING LOCATED WITHIN THE CRAWL SPACE & ON THE SITE.
- 2. ON-SITE PLUMBING CONTRACTOR TO EXTEND DOMESTIC WATER SERVICE THRU FLOOR & PROVIDE THE FOLLOWING:
 - PROVIDE & INSTALL WATER METER (AS REQUIRED) - INSTALL RPZ (PROVIDED BY MODUALL)
 - INSTALL FILTRATION SYSTEM (PROVIDED BY OWNER)
 - PROVIDE & INSTALL ALL REQUIRED DOMESTIC WATER PIPING, FITTINGS & SHUT-OFF VALVES AS REQUIRED - REFER TO DOMESTIC WATER ONE-LINE DIAGRAM
- 3. ON-SITE PLUMBING CONTRACTOR TO CONNECT ALL GREASE WASTE, SANITARY WASTE & VENT PIPING LOCATED WITHIN THE CRAWLSPACE TO THE PLUMBING FIXTURE, TRENCH DRAIN, FLOOR SINK & 'STUB-OUT' LOCATED IN THE MODULAR BUILDING.
- 4. ON-SITE PLUMBING CONTRACTOR TO PROVIDE & INSTALL THE GREASE INTERCEPTOR PER LOCAL STANDARDS.
- 5. ON-SITE PLUMBING CONTRACTOR TO CONNECT DOMESTIC WATER & WASTE PIPING TO COFFEE EQUIPMENT - REFER TO COFFEE EQUIPMENT CONNECTION SCHEDULE B/P4.0.
- 6. NATURAL GAS REQUIREMENT FOR THE ON-SITE PLUMBING CONTRACTOR TO INCLUDE THE FOLLOWING: - CONNECTION FROM THE GAS METER TO THE NATURAL GAS 'STUB-OUT' ON THE MODULAR BUILDING - CONNECTION FROM THE HVAC EQUIPMENT TO THE NATURAL GAS CONNECTION ON THE MODULAR
- 7. ON-SITE PLUMBING CONTRACTOR TO COORDINATE ALL UTILITY ROUTING & TERMINATIONS WITH UTILITY COMPANY.
- 8. ON-SITE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL PLUMBING PIPING TESTING PER LOCAL STANDARDS.
- 9. PLUMBING FIXTURES ARE INSTALLED AS PART OF THE MODULAR BUILDING. ONCE ALL UTILITY SERVICES ARE CONNECTED & PIPING TESTED, ON-SITE PLUMBING CONTRACTOR TO ENSURE PROPER OPERATION.
- 10. WATER HEATER IS INSTALLED AS PART OF THE MODULAR BUILDING. ONCE ALL UTILITY SERVICES ARE CONNECTED & PIPING TESTED, ON-SITE PLUMBING CONTRACTOR TO 'SET-UP' THE WATER HEATER PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

EVERYTHING SHOWN ON THIS SHEET HAS BEEN CONSTRUCTED/INSTALLED IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THE JOB SITE FOR 'SITE ADAPT' CONSTRUCTION. REFER TO THE 'SITE ADAPT' DRAWINGS FOR ADDITIONAL INFORMATION.

<u> ATTENTION LOCAL INSPECTIONS DEPARTMENT -</u> THE FOLLOWING ITEMS HAVE NOT BEEN COMPLETED BY MODUALL:

- SANITARY PIPING LOCATED IN CRAWL SPACE AND BELOW GRADE. • GREASE WASTE PIPING LOCATED IN THE CRAWL SPACE AND BELOW GRADE.
- VENT PIPING LOCATED IN THE CRAWL SPACE AND BELOW GRADE. • DOMESTIC WATER PIPING LOCATED IN THE CRAWL SPACE AND BELOW GRADE.
- ALL EXTERIOR GAS PIPING.
- SUMP PUMP INSTALLATION AND PIPING.
- GREASE INTERCEPTOR INSTALLATION. • CONDENSATE CONNECTION FROM 'RTU-1' TO CONDENSATE CONNECTION ON MODULAR BUILDING.

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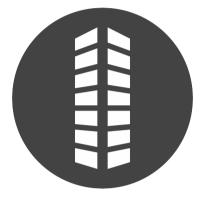
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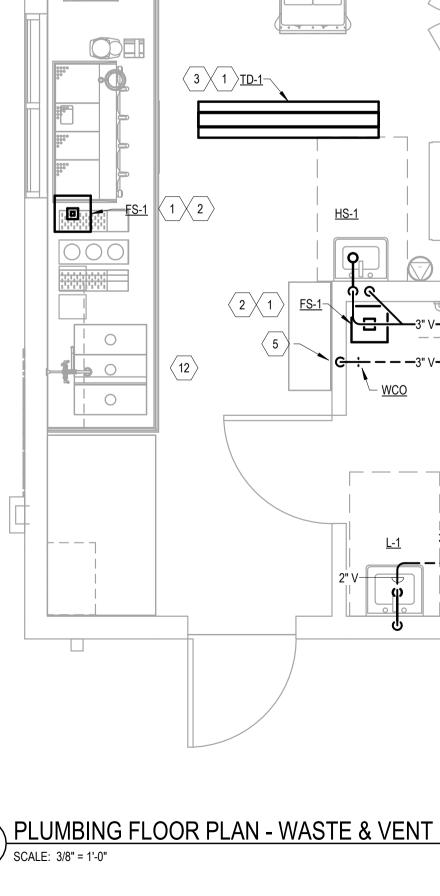


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Issue/Description

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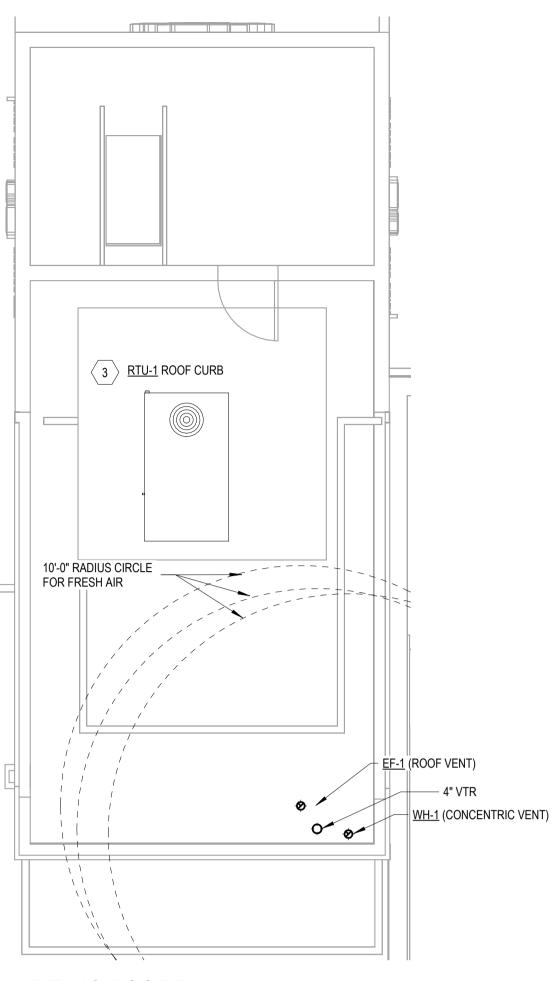
PLUMBING FLOOR PLANS DOMESTIC WATER, WASTE & VENT (MODULAR BUILDING)



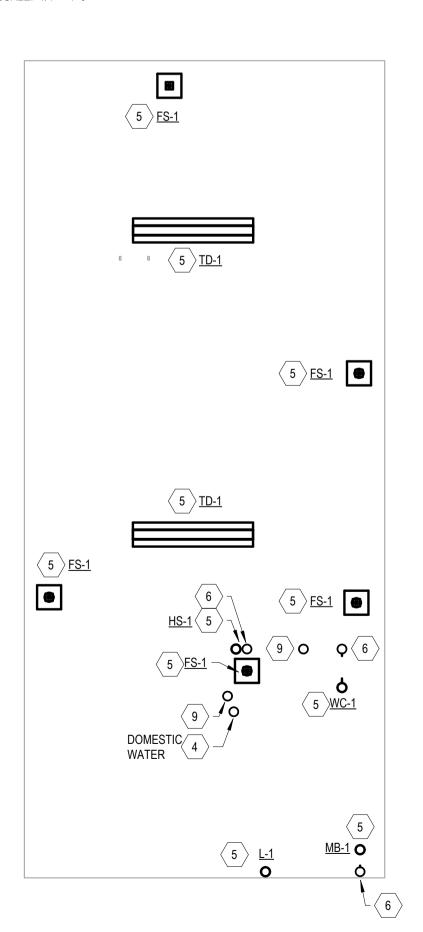
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PLUMBING FLOOR PLAN - WASTE & VENT

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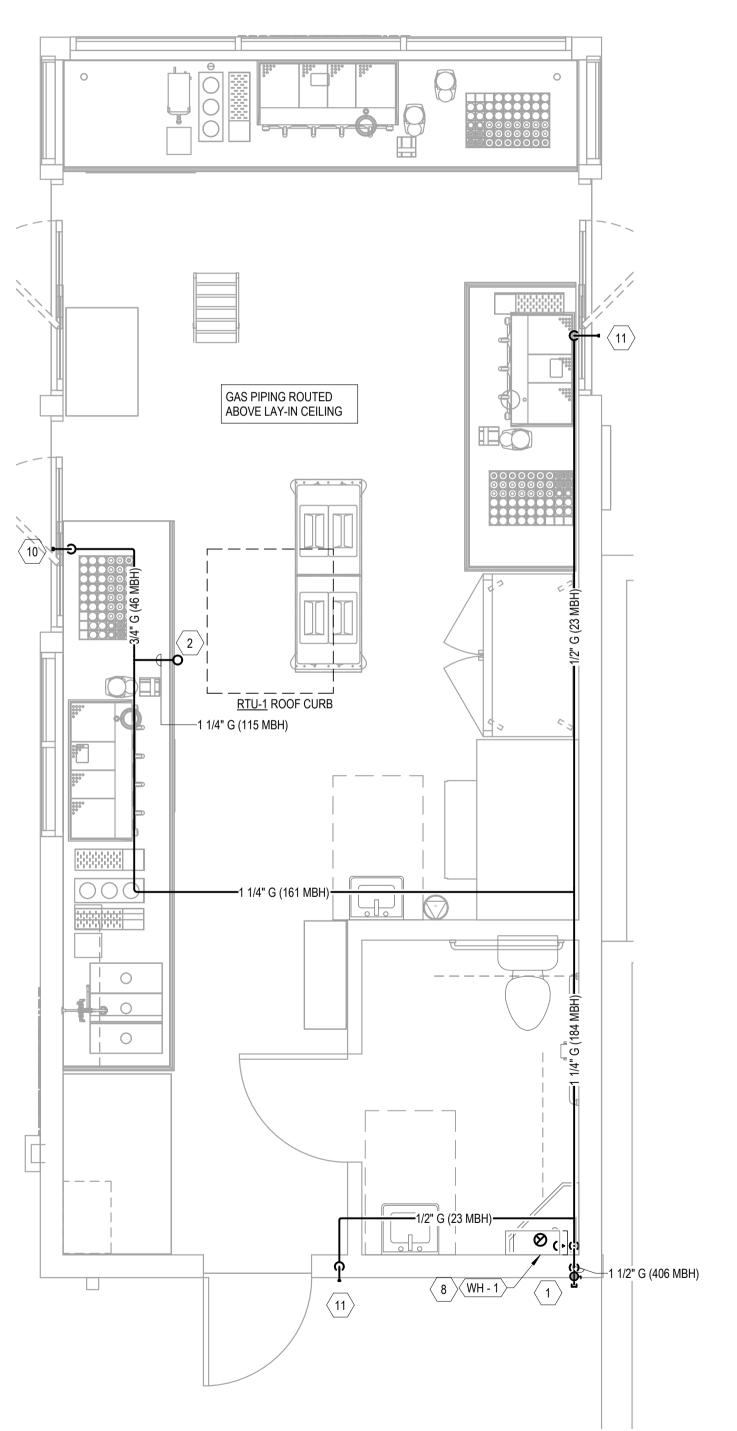
B PLUMBING ROOF PLAN



PLUMBING CRAWL SPACE PLAN

SCALE: 1/4" = 1'-0"

11/11/2025 9:40:03 AM



A PLUMBING FLOOR PLAN - NATURAL GAS

SCALE: 3/8" = 1'-0"

PLUMBING KEY NOTES: (#)

- 1. 1-1/2" G LINE 'CAPPED' IN EXTERIOR WALL FOR FUTURE UTILITY CONNECTION ON SITE. SEAL PENETRATION WEATHERTIGHT.
- 2. 1-1/4" G UP THRU ROOF. SEAL PENETRATION WEATHERTIGHT.
- 3. 1-1/4" G UP THRU ROOF AND TERMINATE WITH 1-1/4" x 1-1/4" x 1-1/4" THREADED T-FITTING FOR ONSITE CONNECTION BY ONSITE CONTRACTOR.
- 4. DOMESTIC WATER SERVICE THRU FLOOR IN THIS AREA TO BE INSTALLED BY 'ON SITE' CONTRACTOR. REFER TO 'DOMESTIC WATER ONE-LINE DIAGRAM' FOR ADDITIONAL INFORMATION.
- WASTE UP THRU FLOOR TO PLUMBING FIXTURE. REFER TO PLUMBING FIXTURE SCHEDULE FOR LINE SIZE SERVING FIXTURE. WASTE PIPING TO BE TERMINATED 4" BELOW FLOOR FOR FUTURE 'ON SITE' CONNECTION.
- 6. VENT UP THRU FLOOR TO PLUMBING FIXTURE. REFER TO PLUMBING FIXTURE SCHEDULE FOR LINE SIZE SERVING FIXTURE. VENT PIPING TO BE TERMINATED 4" BELOW FLOOR FOR FUTURE 'ON SITE' CONNECTION.
- 7. NOT USED.
- 8. 1-1/4" G DOWN TO WATER HEATER. COORDINATE ACTUAL ROUTING AND CONNECTION REQUIREMENTS WITH SITE CONDITIONS. PROVIDE GAS COCK AND DIRTLEG (LINE SIZE). CONNECT PER MANUFACTURER'S INSTRUCTIONS.
- 9. 3" VENT RISER UP THRU FLOOR. VENT PIPING TO BE TERMINATED 4" BELOW FLOOR FOR FUTURE 'ON SITE' CONNECTION.
- 10. 3/4" GAS LINE 'CAPPED' IN EXTERIOR WALL FOR FUTURE CONNECTION TO HEATERS ON SITE. SEAL PENETRATION WEATHERTIGHT.
- 11. 1/2" GAS LINE 'CAPPED' IN EXTERIOR WALL FOR FUTURE CONNECTION TO HEATERS ON SITE. SEAL PENETRATION WEATHERTIGHT.

EVERYTHING SHOWN ON THIS SHEET HAS BEEN CONSTRUCTED/INSTALLED IN A CONTROLLED ENVIRONMENT & WILL BE SHIPPED TO THEJOB SITE FOR 'SITE ADAPT' CONSTRUCTION. REFER TO THE 'SITE ADAPT' DRAWINGS FOR ADDITIONAL INFORMATION.



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RLISLE)

2122 CARLISLE BLVD ALBUQUERQUE, NEW MEXICO

# Date 11/14/25	Issue/Description PERMIT SET

Project No:	61P000006.30
Drawn By:	EAB
Checked By:	ABT

PLUMBING FLOOR PLANS NATURAL GAS, ROOF & CRAWL SPACE (MODULAR BUILDING)

P2.0

	PIPING				TAGS AND SYM	IBOLS
	DIRECTION OF FLOW		(XX	-XXX> -	— EQUIPMENT TAG	
	DOMESTIC COLD WATER	CW		(VV)		
	DOMESTIC HOT WATER	HW		$\begin{pmatrix} XX \\ XX \end{pmatrix}$		$\left(\begin{array}{c} XX \\ XX \end{array}\right)$
	DOMESTIC HOT WATER RETURN	HWR				
	HW AT TEMPERATURE SHOWN	X° HW		R REFEREN GRAM CALL		SECTION HEAD CALLOUT
	TEMPERED WATER	Т	REVISIO			
	SANITARY SEWER	SS			KEYNOTE TAG	POINT OF CONNECTION
	FORCED MAIN	FM		7		•
	GREASE WASTE	GW	Ī ——		EXISTING	
	OIL WASTE	OW			REMOVE EXISTIN	IG (DEMOLISH)
	DRAIN	D			PIPE TAG	
	SANITARY VENT	V				
	STORM DRAIN	SD			F	PIPE DIAMETER
	OVERFLOW STORM DRAIN	OSD			╿ 1 1/2" CW-	
	LOW PRESSURE NATURAL GAS	G	1		1 1/2 0	SEE SPEC FOR PIPE
	MEDIUM PRESSURE NATURAL GAS	MPG		PIPIN	G SYSTEM ——	SPECIFICATIONS
	PIPING SYMBOLS				ABBREVIATIO	DNS
			AFF AFG		NISHED FLOOR NISHED GRADE	
	PIPE UP		ADJ	ADJUSTA	BLE	
	PIPE DOWN		AP BFP	ACCESS I BACKFLO	PANEL W PREVENTER	
	PIPING CAP OR PLUG		DIA DN	DIAMETEI DOWN	R	
ss	DIRECTION OF PIPE SLOPE DOWN		DWG	DRAWING		
	VALVES AND ACCESSORIES		EC ELEV	ELECTRIC ELEVATION	CAL CONTRACTOR ON	
	BALL VALVE		EQ	EQUIPME	NT	
	HOSE BIBB		(E) FCO	EXISTING FLOOR CI	LEANOUT	
——⋈——	GATE VALVE		IBC IMC		TIONAL BUILDING CO TIONAL MECHANICA	
>	GLOBE VALVE		IPC	INTERNA [*]	TIONAL PLUMBING C	CODE
12	CHECK VALVE		IFGC IE		TIONAL FUEL AND G LEVATION	AS CODE
──	BALANCING VALVE		GAL GC	GALLON GENERAL	CONTRACTOR	
\	PRESSURE REDUCING VALVE		GPM	GALLONS	PER MINUTE	
	THREE WAY CONTROL VALVE		LCO MAX	LINE CLEA MAXIMUM		
——————————————————————————————————————	PRESSURE REDUCING VALVE		MC MCA		CAL CONTRACTOR CIRCUIT AMPACITY	
—⊳— AAV	AUTOMATIC AIR VENT		MFR	MANUFAC	CTURER	
— MAV	MANUAL AIR VENT		MH MIN	MANHOLE Minimum		
	STRAINER		MOCP		OVERCURRENT PR	ROTECTION
<u></u>	UNION		(N) (NL)	NEW LOC		
<u></u> Д	THERMOMETER		N/A NC	NOT APPI NORMALI	LICABLE LY CLOSED	
─ ♡	CIRCUIT SETTER		NO	NORMALL	Y OPEN	
M	METER		NIC PC	NOT IN CO	G CONTRACTOR	
	PUMP		PRV RPBP		RE REDUCING VALVE O PRESSURE BACKF	
Ø	PRESSURE GAUGE AND SHUT-OFF VA	ALVE	RE: (RL)	REFEREN RELOCAT	ICE	LOWFINEVERVIER
→ \\\\	REVERSE PRESSURE BACKFLOW PRE	VENTER	SCO	SURFACE	CLEANOUT	
	DRAINS AND CLEANOUTS		SPEC STD	SPECIFIC STANDAR	RD	
0	FLOOR CLEANOUT		TCC (TYP)	TEMPERA TYPICAL	ATURE CONTROL CO	ONTRACTOR
€	FLOOR DRAIN		VTR ´	VENT THE	ROUGH ROOF	
	FLOOR SINK		WCO W/O	WALL CLE WITHOUT		
0	SURFACE CLEANOUT		1			
			1	i		

PLUMBING FIXTURE SCHEDULE

		MANUFACTURER &			R	OUGH IN CON	NECTION SIZIN	G
SYMBOL	OL TYPE MODEL NUMBER		ACCESSORIES	REMARKS	WASTE	VENT	HOT	COLD
					(INCHES)	(INCHES)	(INCHES)	(INCHES)
	FLOOR MOUNTED, TANK TYPE, 17"	ZURN		FLUSH LEVER SHALL BE ON				
WC-1	HIGH, 1.28 GPF, ELONGATED BOWL,	Z5555-K		WIDE SIDE OF STALL PER ADA	3	2		1/2
	12" ROUGH-IN							1
	20"x18" WALL MOUNTED LAVATORY,	ZURN Z5340	VITREOUS CHINA BOWL, METAL DRAIN	PROVIDE WITH 0.5GPM AERATOR				
L-1	4" CENTERSET FAUCET WITH	DELTA 1960-DST	ASSEMBLY, CHROME FAUCETS,	AND FLOOR MOUNTED CARRIER	2	1-1/4	1/2	1/2
	ONE HANDLE CONTROL & 5" SPOUT	WADE W-520	TRAP AND SUPPLY WRAP PROTECTOR KIT	TMV-1				1
	24" x 24" MOP BASIN WITH 6" DROP FRONT	FIAT	10" SPOUT WITH WALL BRACE &	PROVIDE WITH: FIAT #832 HEAVY DUTY				
MB-1	3" STAINLESS STEEL DRAIN & STRAINER	BASIN: TSB-3010	PAIL HOOK, 3/4" MALE HOSE	30" FLEX HOSE & BRACKET, FIAT #889	3	2	1/2	1/2
	STAINLESS STEEL GUARDS ON SIDES	FAUCET: 830-AA	THREAD OUTLET, VACUUM BREAKER	STAINLESS STEEL MOP BRACKET				1
	FLUSH NON-FREEZE BOX TYPE WALL	WOODFORD	VACUUM BREAKER, 3/4" HOSE	SELF DRAINING BODY AND SHANK,				
FPWH-1	HYDRANT, ALL BRASS SELF DRAINING	B67	THREAD OUTLET, PROVIDE WITH	SHANK LENGTH SUFFICIENT				3/4
	BODY, LOOSE KEY, KEY LOCK COVER		SHUTOFF BALL VALVE IN BRANCH PIPE	TO PREVENT FREEZING				1
	POINT OF USE THERMOSTATIC MIXING	LEONARD	MINIMUM FLOW 0.25 GPM,	ASSE 1070 CERTIFIED				
TMV-1	VALVE WITH HIGH TEMPERATURE LIMIT	210-LF-F-DF	MAXIMUM FLOW 1.5 GPM,	SET MAXIMUM TEMPERATURE TO 105°F				
	STOP, INTEGRAL CHECK VALVES		LOCKING TEMPERATURE CONTROL	LEAD FREE ASSEMBLY				
	20"x18" WALL MOUNTED LAVATORY,	ZURN Z5340	VITREOUS CHINA BOWL,	PROVIDE WITH:				
HS-1	4" CENTERSET FAUCET WITH	DELTA 1960-DST	METAL DRAIN ASSEMBLY,	1.5 GPM AERATOR	2	1-1/4	1/2	1/2
	ONE HANDLE CONTROL & 5" SPOUT	WADE W-520	CHROME FAUCETS	AND TMV-1				
	SQUARE CAST IRON BODY,	ZURN	NICKLE BRONZE					
FS-1	FLASHING COLLAR, PORCELAIN	Z1901	REMOVABLE HALF GRATE	12" SQUARE X 8" DEEP	2	1-1/4		
	ENAMELED INTERIOR, DOME STRAINER							
	CUSTOM MADE STAINLESS STEEL TRENCH DRAIN							
TD-1	14 GUAGE STAINLESS STEEL, 60" x 11" DRAIN				3	1-1/2		
	3" OUTLET							
	WALL CLEANOUT TEE WITH	ZURN						
WCO	COUNTERSUNK PLUG	Z1441						
	STAINLESS STEEL COVER PLATE							
SCO-1	ROUND CAST IRON BODY	ZURN	VANDAL RESISTANT SCREWS	PROVIDE 2-WAY CLEANOUT				
AND	BRONZE DOUBLE FLANGED HOUSING	Z1474-N-VP	TAPER THREAD BRONZE PLUG	AT EACH SCO-2,				
SCO-2	HEAVY DUTY SECURED COVER			TWO COVERS REQUIRED				
	FLOOR CLEANOUT TEE WITH	ZURN	LOAD CLASS E OR BETTER					
HDFCO	COUNTERSUNK PLUG, HEAVY DUTY	1400-DC	CAPABLE OF BEING DRIVEN ON		4			
	NICKEL BRONZE SECURED COVER							
	REDUCED PRESSURE ZONE ASSEMBLY. LEAD FREE	WATTS	PROVIDE WITH QUARTER TURN BALL VALVES					
RPZ-1	CAST COPPER SILICON ALLOY BODY, INTERNAL RELIEF	LF009	(QT ACCESSORY)	ASSE 1013 APPROVED				
	VALVE, BALL VALVE TEST COCKS							1
	ICE MACHINE/BEVERAGE DISPENSER	WATTS	ASSE 1022 DUAL CHECK VALVE					
DCV-1	DOUBLE CHECK	SD-3	STAINLESS STEEL	LEAD FREE ASSEMBLY				
	BACK FLOW PREVENTER							i
NOTE:	1. FIXTURES SHOWN CONSTITUTE NEGLIGIBLE CHANGE T	O OVERALL WATER SERVIC	<u>.</u>		-			
	2. ALL CONNECTIONS TO POTABLE WATER SYSTEM SHALL	CONFORM TO NSF/ANSI-61	AND NSF/ANSI-372.					l

TANKLESS GAS FIRED WATER HEATER SCHEDULE										
PUT	INLET WATER	WATER SET	RECOVERY RATE AT	MIN/MAX FLOW	FLUE/COMB.	VOLTS/	г. ,	DEPTH	WIDTH	HEIGHT

SYMBOL	MANUFACTURER	MODEL	MIN/MAX INPUT (MBH @ SL)	MIN/MAX OUTPUT (MBH @ ALT)	INLET WATER TEMP (°F)	WATER SET TEMP (°F)	RECOVERY RATE AT 70°F RISE (GPM)	MIN/MAX FLOW RATE (GPM)	FLUE/COMB. AIR SIZE (IN.)	VOLTS/ PHASE	FLA	DEPTH (IN.)	WIDTH (IN.)	HEIGHT (IN.)	OPER. WEIGHT (LBS.)	NOTES
WH-1	RINNAI	RU199iN	15/199	14/185	50	120	5.25	0.26//9.8	2/2	120/1	4	11-1/2	18-1/2	31-1/2	75	1, 2
NOTES:																

1. CONDENSING, TANKLESS, TEMPERATURE CONTROLLED, CONTINUOUS FLOW, GAS WATER HEATER. PROVIDE WITH PLUMBING INSTALLATION KIT, CONCENTRIC VENT KIT (ROOF), WALL MOUNT BRACKET. MANIFOLD ELECTONIC CONTROLLERS. PRESSURE ACTIVATION VALVE(S), AND EZ CONNECT CORD. 2. PER MANUFACTURER, P.C., SHALL BE A LICENSED PLUMBER CERTIFIED BY THE MANUFACTURER.

SUMP PUMP SCHEDULE														
						LIEAD		ELECT	RICAL	DISCUL SIZE		BASIN		
SYMBOL	SERVICE	MANUFACTURER	MODEL	PUMP TYPE	FLOW (GPM)	HEAD (FT W.C.)	MIN. HP	VOLT/ PHASE	FLA	DISCH. SIZE (IN.)	DIAMETER (IN.)	DEPTH (IN.)	MIN. VOLUME (GAL.)	NOTES
SP-1	SUMP	ZOELLER	KIT 108	SIMPLEX SUBMERSIBLE	43	5	0.3	115/1	9.7	2	12-1/4	14-7/8	30	1,2,3
NOTES: 1.	PROVIDE WIT	H ACCESSIBLE ELECTF	RICAL POWER	OUTLET.										

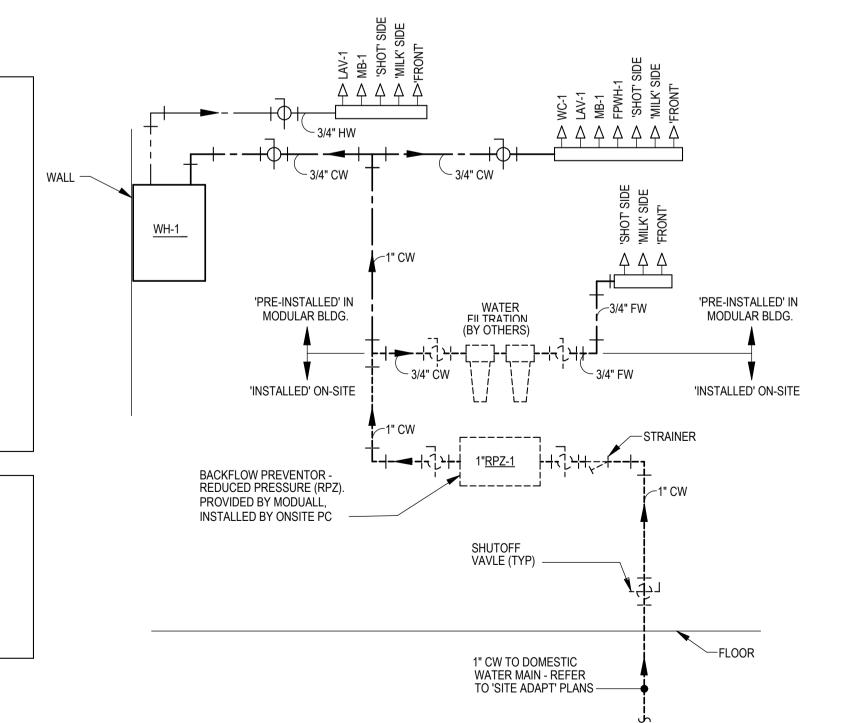
-MINIMUM 12" ABOVE ROOF NORMALLY. EXTEND TO FLASHING AND COUNTERFLASHING HEIGHT OF PARAPET WHEN OF VENT THRU ROOF IS BY WITHIN 10' OF PARAPET. ROOFING CONTRACTOR. PLUMBING CONTRACTOR ROOF - REFER TO ARCHITECTURAL TO COORDINATE INSTALL. PLANS FOR ACTUAL ROOF TYPE & PITCH PRIOR TO ROUGH-IN. ANCHOR PIPE TO ROOF CORE DRILL ROOF OR DECK WITH U-BOLT AROUND PROVIDE SLEEVE IF REQUIRED BY TYPE OF PIPE AND ANGLE IRON ROOF DECK. PROVIDE WELDED OR SCREWED TO ROOF DECK OR JOIST. FIRE STOP SEAL BETWEEN PIPE AND SLEEVE OR DECK - MINIMUM 12" BELOW ROOF PROVIDE PIPE INCREASER - NO-HUB PIPE CONNECTORS IF/WHERE CODE REQUIRES A ON CAST IRON PIPE OR MINIMUM 3" VENT THRU ROOF BELL AND SPIGOT IF PVC.

REFER TO PLANS FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR MINIMUM THREE FEET FROM PROPERTY LINE, OR TEN FEET HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, OR ONE FOOT FROM ANY VERTICAL SURFACE. LOCATE VTR MINIMUM 18" FROM PARAPET, EXPANSION JOINT, EQUIPMENT CURB, ETC. OFFSET IN CEILING SPACE WHERE REQUIRED TO MEET THESE CONDITIONS.

\ \ VENT THRU ROOF VTR DETAIL SCALE: NTS

1/11/2025 9:40:03 AM

LINE CLEANOUT / WALL CLEANOUT



\ DOMESTIC WATER ONE-LINE DIAGRAM

2. PROVIDE WITH OPTIONAL CHECK VALVE.

3. PROVIDE WITH ZOELLER BRANDED POLYETHYLENE SLOTTED BASIN AND BASIN COVER.

ON-SITE PLUMBING CONTRACTOR NOTES

ALL OF THE DOMESTIC WATER PIPING LOCATED WITHIN THE

ON-SITE PLUMBING CONTRACTOR TO EXTEND DOMESTIC

- INSTALL RPZ (PROVIDED BY MODUALL)

EQUIPMENT CONNECTION SCHEDULE.

DETAIL NOTES:

FIXTURE/EQUIPMENT.

WATER SERVICE THRU FLOOR & PROVIDE THE FOLLOWING: - PROVIDE & INSTALL WATER METER (AS REQUIRED)

- INSTALL FILTRATION SYSTEM (PROVIDED BY OWNER)

- PROVIDE & INSTALL ALL REQUIRED DOMESTIC WATER

PIPING, FITTINGS & SHUT-OFF VALVES AS REQUIRED

ON-SITE PLUMBING CONTRACTOR TO CONNECT DOMESTIC

WATER PIPING TO COFFEE EQUIPMENT - REFER TO COFFEE

- REFER TO DOMESTIC WATER ONE-LINE DIAGRAM

ON-SITE PLUMBING CONTRACTOR TO COORDINATE ALL

UTILITY ROUTING & TERMINATIONS WITH UTILITY COMPANY.

5. ON-SITE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL PLUMBING PIPING TESTING - PER LOCAL STANDARDS.

DETAIL IS SCHEMATIC & SHOULD BE USED AS A GUIDELINE.

MODIFY PIPING AS REQUIRED PER SITE CONDITIONS &

REFER TO PLUMBING FIXTURE SCHEDULE & EQUIPMENT

REFER TO CIVIL PLANS FOR IRRIGATION SYSTEM REQUIREMENTS.

EXTERIOR OF THE BUILDING - PROVIDED & INSTALLED BY OTHERS.

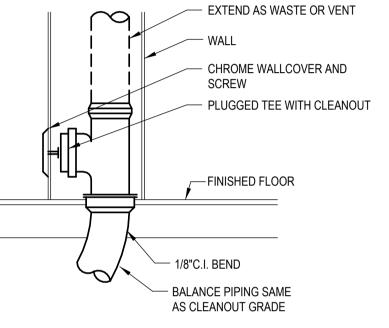
IRRIGATION SYSTEM BACKFLOW PROTECTION TO BE LOCATED

CONNECTION SCHEDULE FOR LINE SIZE SERVING

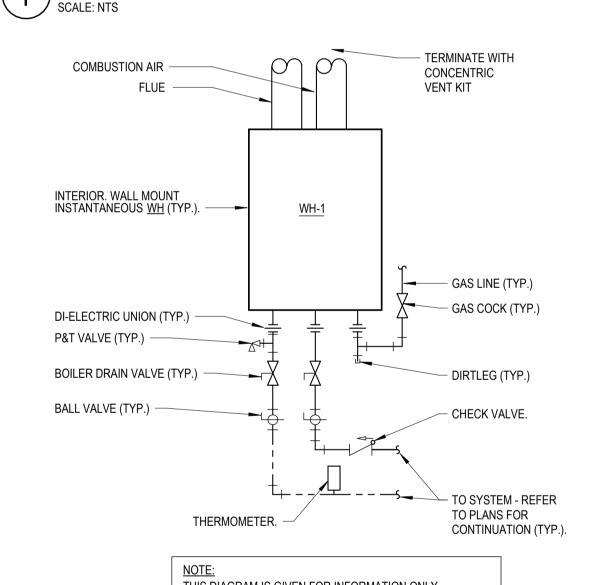
MANUFACTURER WRITTEN INSTRUCTIONS.

1. ON-SITE PLUMBING CONTRACTOR TO PROVIDE & INSTALL

CRAWL SPACE & ON THE SITE.

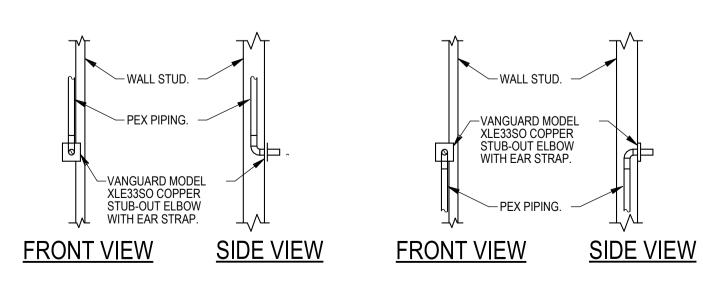


WALL CLEANOUT DETAIL

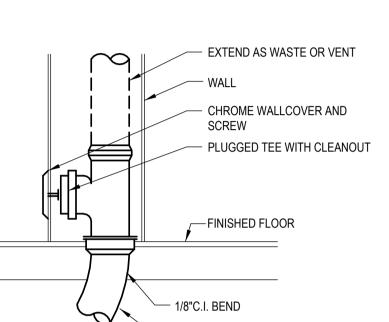


THIS DIAGRAM IS GIVEN FOR INFORMATION ONLY.
P.C. SHALL INSTALL SYSTEM AS REQUIRED
BY MANUFACTURER'S WRITTEN INSTRUCTIONS.

INSTANTANEOUS (TANKLESS) WATER HEATER DETAIL



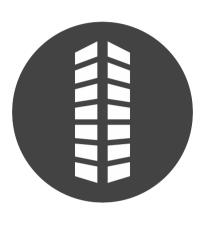
3 DOMESTIC WATER STUB-OUT DETAIL



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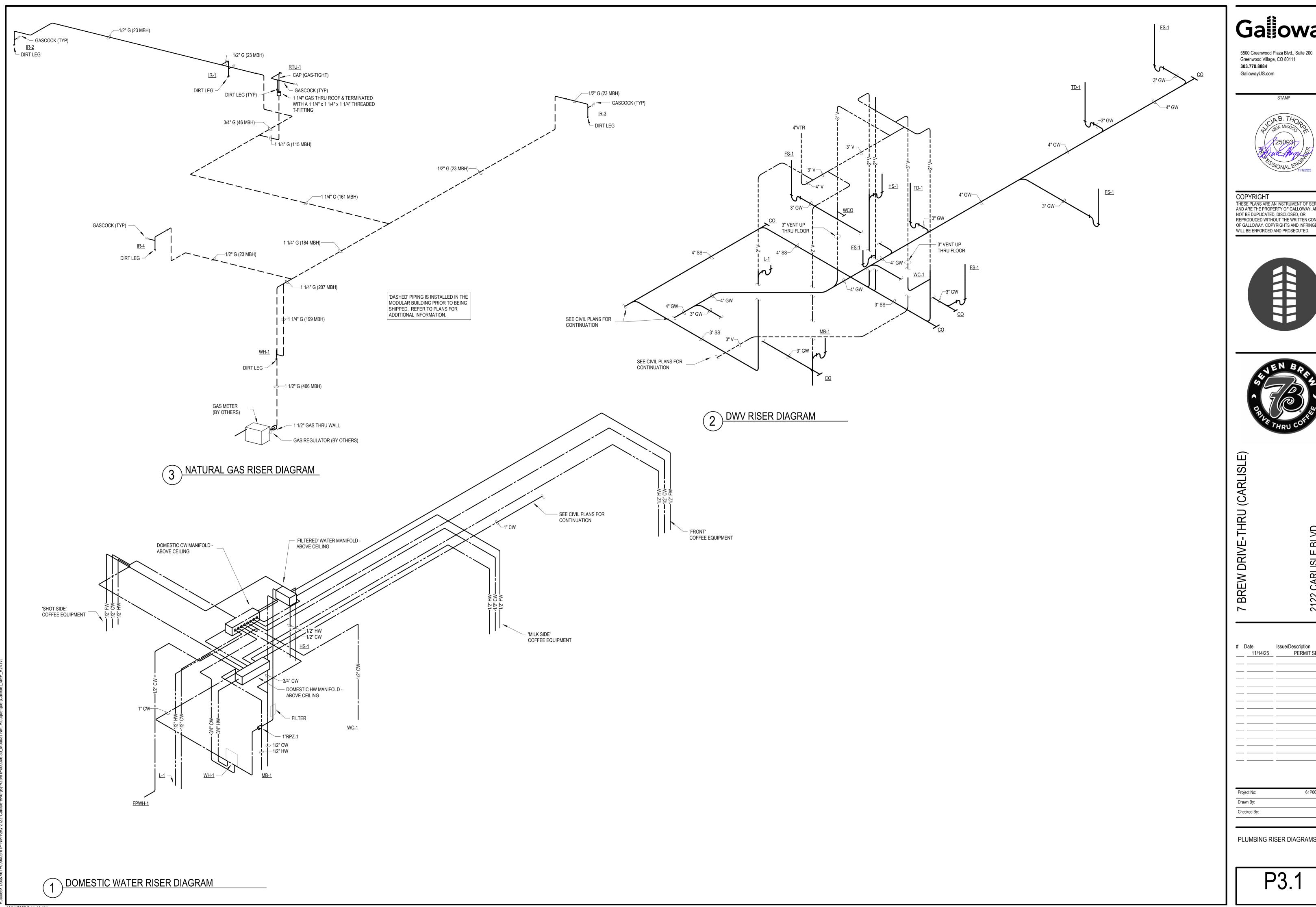
BREW

BLVD E, NEW

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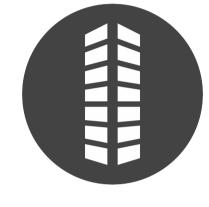
PLUMBING SCHEDULES & DETAILS (MODULAR BUILDING)



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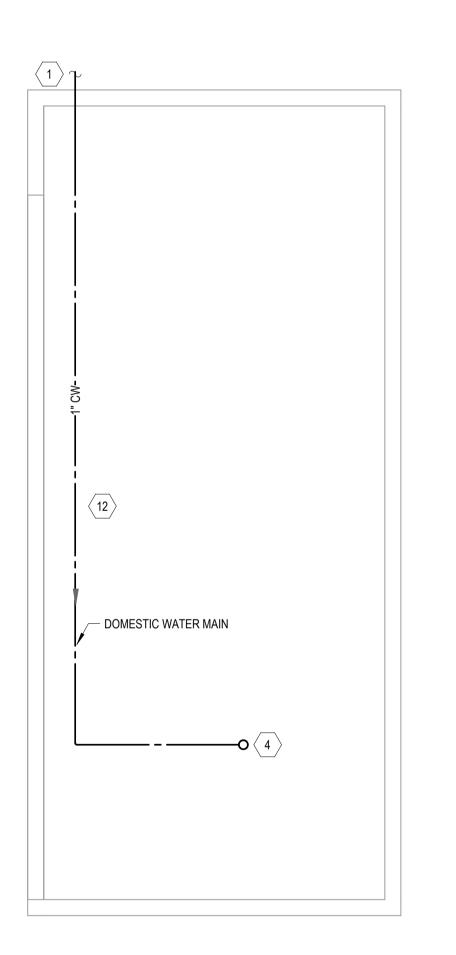


2122 CARLISLE BLVD ALBUQUERQUE, NEW

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Project No:	61P000006.30
Drawn By:	EAB
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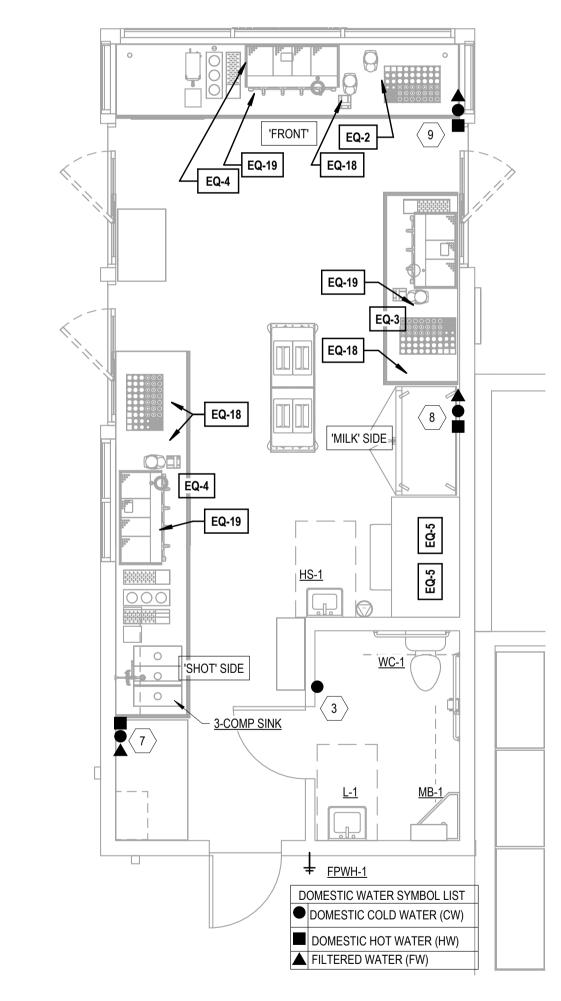
PLUMBING RISER DIAGRAMS



PC TO PROVIDE THE IRRIGATION PIPING FROM THE MODULAR BUILDING CONNECTION TO THE PRESSURE VACUUM BREAKER (PVB) FOR THE IRRIGATION SYSTEM - ALL PIPING WITHIN CRAWLSPACE TO BE COPPER. PC TO PROVIDE & INSTALL PVB & DRAIN VALVE. REFER TO IRRIGATION PLANS FOR FURTHER REQUIREMENTS BY PC & ADDITIONAL INFORMATION.

PLUMBING CRAWL SPACE PLAN - DOMESTIC WATER

SCALE: 1/4" = 1'-0"



B PLUMBING EQUIPMENT PLAN - DOMESTIC WATER

SCALE: 1/4" = 1'-0"

 $\langle 12 \rangle$ (TYP.) $\left\langle 6 \right\rangle \left\langle 2 \right\rangle$ <u>TD-1</u> 3" GW---- $\left\langle 6 \right\rangle 2 > FS-1$ $\langle 12 \rangle$ (TYP.) 6 2 TD-1 2 ><u>FS-1</u> 6 2 FS-1 φ <u>wc</u> • 5 3" V UP - $^{2}\langle$ 12 \rangle (TYP.) (12) (TYP.) A PLUMBING CRAWL SPACE PLAN - WASTE & VENT SCALE: 3/8" = 1'-0"

PLUMBING KEY NOTES: (#)

- 1. REFER TO CIVIL SITE UTILITY PLAN FOR CONTINUATION. COORDINATE ACTUAL LOCATION OF FOUNDATION WALL PENETRATION WITH G.C. PROVIDE SLEEVE & SEAL WATERTIGHT.
- 2. CONNECT NEW WASTE TO WASTE PIPING "STUB-OUT" OF MODULAR BUILDING. REFER TO MODULAR BUILDING DRAWINGS FOR ADDITION INFORMATION.
- 3. 1" DOMESTIC WATER SERVICE THIS AREA PROVIDE & INSTALL WITH ACCESSIBLE SHUT-OFF VALVE. INSTALL RPZ BACKFLOW PREVENTER PROVIDED BY MODUALL (WATTS MODEL LF009M3-QT 1). FILTRATION SYSTEM PROVIDED BY OTHERS, INSTALLED BY ONSITE PC. REFER TO DOMESTIC WATER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- 4. EXTEND 1" DOMESTIC WATER SERVICE THRU FLOOR THIS AREA REFER TO DOMESTIC WATER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- 5. CONNECT VENT TO VENT PIPING 'STUB-OUT' OF MODULAR BUILDING. REFER TO MODULAR BUILDING DRAWINGS FOR ADDITIONAL INFORMATION.
- 6. FIXTURE VENTED THROUGH COMBINATION WASTE VENT PIPE.
- 7. 'SHOT' SIDE CW, HW & FW RISER PC TO CONNECT TO COFFEE EQUIPMENT & 3-COMP SINK. REFER TO COFFEE EQUIPMENT CONNECTION SCHEDULE.
- 8. 'MILK' SIDE CW, HW & FW RISER PC TO CONNECT TO COFFEE EQUIPMENT & ICE MAKER(S). REFER TO COFFEE EQUIPMENT CONNECTION SCHEDULE.
- 9. 'FRONT' CW, HW & FW RISER PC TO CONNECT TO COFFEE EQUIPMENT. REFER TO COFFEE EQUIPMENT
- 10. NOT USED.

CONNECTION SCHEDULE.

- 11. NOT USED.
- 12. ALL PIPING IN CRAWLSPACE SHALL BE PROVIDED WITH INSULATION AND HEAT TRACE (3.3 WATTS PER FOOT AT 120V/1PH WITH 1-1/2" INSULATION).

EVERYTHING ON THIS SHEET TO BE INSTALLED BY THE ONSITE CONTRACTOR.

COFFEE EQUIPMENT CONNECTION SCHEDULE (SITE ADAPTION CONNECTIONS):

EQ-2 HOT WATER MACHINE

BY OTHERS. PROVIDE 1/2" HW CONNECTION AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP. PROVIDE WITH DCV-1.

EQ-3 ESPRESSO MACHINE

BY OTHERS. PROVIDE 1/2" FW/CW CONNECTION(S) AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.

PROVIDE WITH DCV-1.

EQ-4 ESPRESSO MACHINE

BY OTHERS. PROVIDE 1/2" FW/CW CONNECTION(S) AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.

PROVIDE WITH <u>DCV-1</u>.

EQ-5 ICE MAKER W/ BIN BY OTHERS. PROVIDE 1/2" FW CONNECTION AS REQUIRED BY

MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.

PROVIDE WITH <u>DCV-1</u>.

EQ-18 RAPID RINSER BY OTHERS. PROVIDE 1/2" CW CONNECTION AS REQUIRED BY

MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.

BY OTHERS. PROVIDE 1/2" CW CONNECTION AS REQUIRED BY MANUFACTURER. EXTEND DRAIN LINE TO FLOOR SINK - PROVIDE AIR GAP.

3-COMPARTMENT SINK

SINK AND TRIM BY OTHERS. PROVIDE 3/4" CW, 3/4" HW & 3" WASTE
CONNECTIONS PER LOCAL CODE REQUIREMENTS. INDIRECT CONNECT TO
FLOOR SINK - PROVIDE AIR GAP

COFFEE EQUIPMENT NOTES:

- 1. ACTUAL EQUIPMENT INCLUDING ALL ASSOCIATED ACCESSORIES, FAUCETS, TRIM, ETC. PROVIDED BY OTHERS. VERIFY ACTUAL KITCHEN EQUIPMENT LOCATION, ROUGH-IN & CONNECTION REQUIREMENTS WITH MODUALL PRIOR TO ROUGH-IN.
- COFFEE EQUIPMENT INSTALLED BY OTHERS, CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO EQUIPMENT PROVIDE ACCESSIBLE SHUT-OFF VALVES, DISCONNECTS, ETC. AS REQUIRED BY 7BREW.
- PROVIDE ADDITIONAL BACKFLOW PROTECTION AS REQUIRED BY AUTHORITY HAVING JURISDICTION (AHJ) AND/OR COFFEE EQUIPMENT SUPPLIER (7BREW). IF REQUIRED, P.C. SHALL PROVIDE & INSTALL THE REQUIRED BACKFLOW DEVICES IN ACCORDANCE WITH CODE & LOCAL A.H.J.
- 4. PROVIDE METAL BODY, CHROME PLATED, 1/4-TURN STOP(S) ON ALL DOMESTIC WATER SUPPLY(S) TO COFFEE EQUIPMENT. COORDINATE REQUIREMENTS WITH 7BREW PRIOR TO ROUGH-IN.

SUMP PUMP - PROVIDE WITH SLOTTED BASIN,
ACCESSIBLE ELECTRICAL POWER OUTLET, AND
CHECK VALVE. EXTEND 2" WASTE LINE TO EXTERIOR
OF BUILDING - COORDINATE EXACT LOCATION AND
ROUTING WITH THE ARCHITECT AND CIVIL ENGINEER.
SUMP PUMP DISCHARGE TO GREEN SPACE SO AS TO
NOT CAUSE A NUISANCE OR EROSION.

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DRIVE-THRU

te Issue/Description
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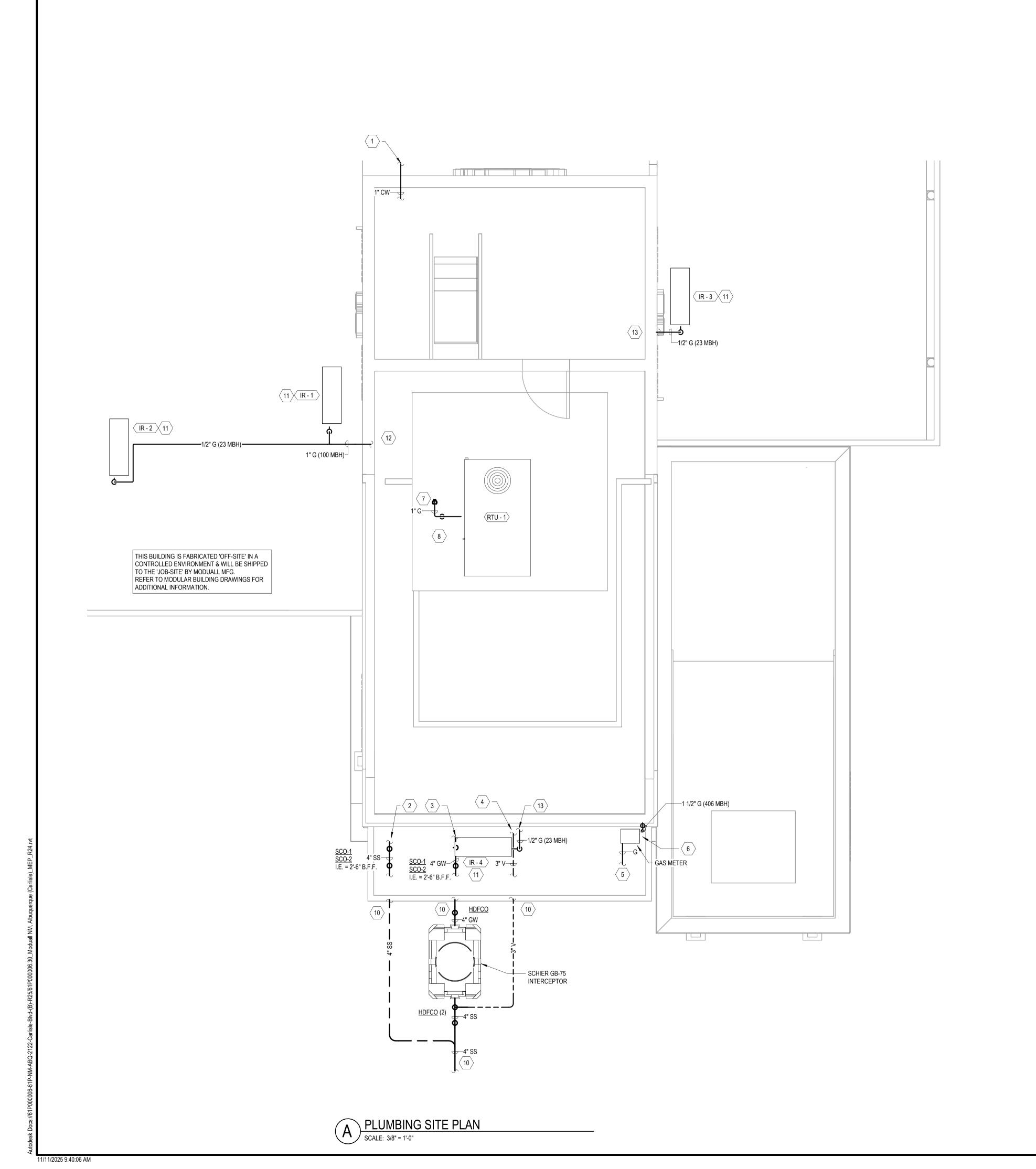
PLUMBING CRAWL SPACE PLAN (SITE ADAPT)

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PLUMBING KEY NOTES: (#)

- 1. 1" DOMESTIC WATER SERVICE REFER TO CIVIL SITE UTILITY PLAN FOR ACTUAL LOCATION & ROUTING REQUIREMENTS. CONTRACTOR SHALL VERIFY WATER PRESSURE. IF PRESSURE IS ABOVE 80 PSI AFTER BACKFLOW PREVENTER, A PRV SHALL BE INSTALLED (WATTS OR EQUIVALENT), IF PRESSURE AFTER BACKFLOW PREVENTER IS BELOW 40 PSI, A BOOSTER PUMP SHALL BE INSTALLED (CONTACT ENGINEER FOR
- 2. 4" SANITARY WASTE SERVICE PROVIDE CLEANOUTS AS REQUIRED BY AHJ. REFER TO CIVIL SITE UTILITY
- PLAN FOR ACTUAL LOCATION & ROUTING REQUIREMENTS. PROVIDE & INSTALL NEW GREASE INTERCEPTOR - SCHIER GB-75 (75 GPM). REFER TO DETAIL FOR ADDITIONAL INFORMATION. REFER TO CIVIL PLANS FOR ACTUAL LOCATION & ORIENTATION.
- 4. 3" V BELOW GRADE FOR GREASE INTERCEPTOR REFER TO CIVIL SITE UTILITY PLAN FOR ACTUAL LOCATION & ROUTING REQUIREMENTS.
- REQUIREMENTS WITH LOCAL GAS COMPANY PRIOR TO ROUGH IN. APPROXIMATE TOTAL GAS LOAD = 406
- 6. CONNECT NEW 1-1/2" G FROM METER TO 'STUB-OUT' ON BUILDING (WALL) FIELD VERIFY ACTUAL
- 8. EXTEND 1" GAS TO 'RTU-1' & CONNECT PER MANUFACTURER'S INSTRUCTIONS PROVIDE GASCOCK & DIRTLEG (LINE SIZED). FIELD VERIFY ACTUAL CONNECTION & ROUTING REQUIREMENTS PRIOR TO ROUGH-

- 11. 1/2" GAS TO HEATER. COORDINATE ACTUAL ROUTING AND CONNECTION REQUIREMENTS WITH SITE
- 12. CONNECT NEW 3/4" GAS 'STUB-OUT' ON BUILDING (WALL) FIELD VERIFY ACTUAL REQUIREMENTS.

GAS DEMAND SCHEDULE

SPACE	DESCRIPTION	LOAD (MBH)
7 BREW COFFEE	RTU-1	115 MBH
	WH-1	199 MBH
	IR-1/2/3/4	23 MBH (EACH)
	TOTAL:	406 MBH

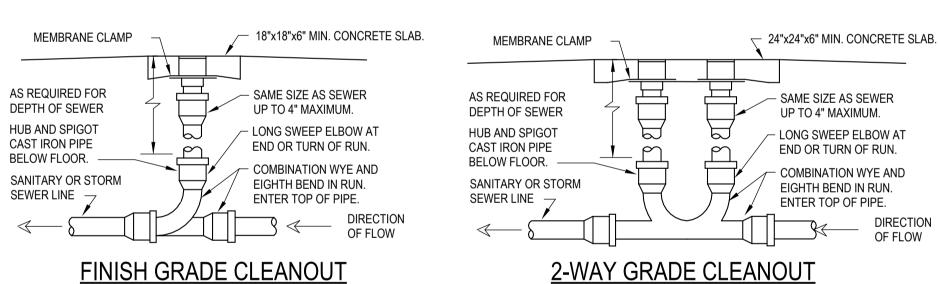
*PER TABLE 402.4(1) - 2018 IFGC -GAS SIZED AT A TOTAL EQUIVALENT LENGTH -

- GAS SIZED AT 7" W.C. - PRESSURE DROP OF 0.3" W.C. - SPECIFIC GRAVITY OF 0.60 - SCHEDULE 40 METALLIC PIPE

- PLAN FOR ACTUAL LOCATION & ROUTING REQUIREMENTS.
- 3. 4" GREASE WASTE SERVICE PROVIDE CLEANOUTS AS REQUIRED BY AHJ. REFER TO CIVIL SITE UTILITY
- 5. PROPOSED LOCATION OF NEW GAS METER COORDINATE ACTUAL LOCATION & CONNECTION
- 7. CONNECT NEW 1" G TO 'STUB-OUT' ON BUILDING (ROOF) FIELD VERIFY ACTUAL REQUIREMENTS.
- NOT USED.
- 10. REFERENCE CIVIL SITE PLAN FOR LOCATION OF INTERCEPTOR AND PIPING.
- CONDITIONS. PROVIDE GASCOCK & DIRTLEG (LINE SIZED). CONNECT PER MANUFACTURER'S INSTRUCTIONS.
- 13. CONNECT NEW 1/2" GAS 'STUB-OUT' ON BUILDING (WALL) FIELD VERIFY ACTUAL REQUIREMENTS.

SITE UTILITIES (DOMESTIC WATER, SANITARY SEWER & NATURAL GAS) TO BE COORDINATED WITH CIVIL ENGINEER.

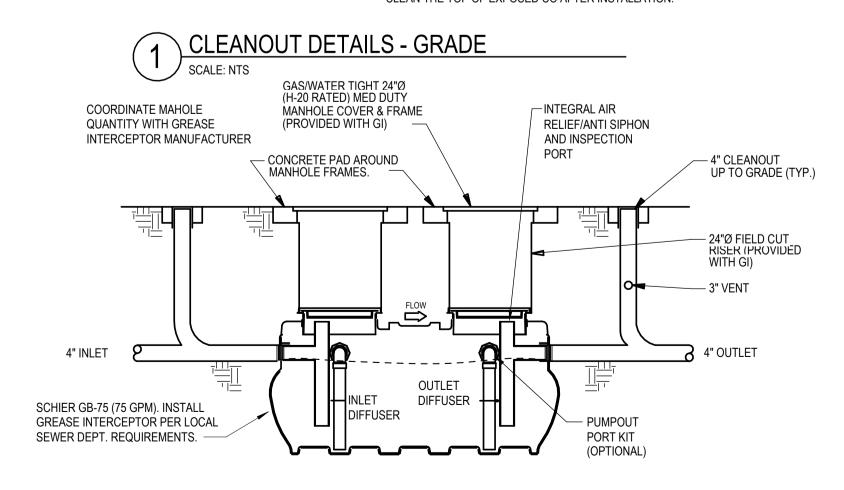
- P.C. TO COORDINATE LOCATIONS OF ALL FLOOR RECEPTORS AND CLEANOUTS (FLOOR, WALL, AND GRADE) WITH G.C. AND OWNER PRIOR TO ROUGH-IN. MAINTAIN VISIBILITY AND ACCESSIBILITY AS REQUIRED BY CODE.
- B. ALL GAS PIPING SHALL BE CLOSELY COORDINATED WITH GC & OWNER PRIOR TO INSTALLATION.



FINISH GRADE CLEANOUT

1. LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT 50' INTERVALS ON STRAIGHT RUNS, AND/OR WHERE SHOWN ON PLANS. PROVIDE BACK FILL PER ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND. CONSULT LOCAL CODES FOR OTHER CO REQUIREMENTS.

2. ROUND SECURED GASKETED NICKEL BRONZE ADJUSTABLE TOP WITH "CO" CAST IN COVER, PROVIDE CLEANOUT TOP WITH VARIATIONS SUITABLE FOR FLOOR COVERING (CARPET MARKER, RECESSED FOR TILE, SCORIATED FOR UNFINISHED FLOORS). PROVIDE GASKETED PLASTIC PLUG IN CAST IRON BODY. USE TEFLON JOINT COMPOUND ON PLUG THREADS. CLEAN THE TOP OF EXPOSED CO AFTER INSTALLATION.



- 1. PROVIDE WITH 'PUMPOUT PORT' & FIELD CUT RISERS P.C. SHALL COORDINATE RISER LENGTH WITH ACTUAL SITE CONDITIONS PRIOR TO PURCHASE.
- 2. TOP OF RING & COVER SHALL BE A MINIMUM OF 2" ABOVE SURROUNDING GRADE. 3. INSTALLATION & FABRICATION PER LATEST ADOPTED CODE & AUTHORITY HAVING JURISDICTION (AHJ).

GREASE INTERCEPTOR DETAIL

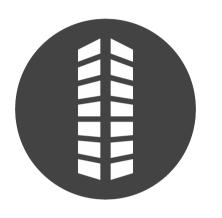
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# Date 11/14/25	Issue/Description PERMIT SET

Drawn By: Checked By:

PLUMBING SITE PLAN (SITE ADAPT)

15A: GENERAL

15A 1-1 GENERAL REQUIREMENTS

REQUIREMENTS UNDER DIVISION ONE AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THESE SPECIFICATIONS SHALL BE A PART OF THIS SECTION. CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH ITS CONTENTS AS TO REQUIREMENTS THAT AFFECT THIS DIVISION OR SECTION. THE WORK REQUIRED UNDER THIS SECTION INCLUDES MATERIAL, EQUIPMENT, APPLIANCES, TRANSPORTATION, SERVICES, AND LABOR REQUIRED TO COMPLETE THE ENTIRE SYSTEM AS REQUIRED BY DRAWINGS AND SPECIFICATIONS.

THE SPECIFICATIONS AND DRAWINGS FOR THE PROJECT ARE COMPLEMENTARY, AND PORTIONS OF THE WORK DESCRIBED IN ONE SHALL BE PROVIDED AS IF DESCRIBED IN BOTH. IN THE EVENT OF DISCREPANCIES, NOTIFY THE ENGINEER AND/OR OWNER AND REQUEST CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED.

15A 1-2 INSPECTION OF SITE

PRIOR TO SUBMITTING BID, VISIT THE SITE OF THE PROPOSED WORK AND BECOME FULLY INFORMED AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. FAILURE TO DO SO WILL NOT BE CONSIDERED SUFFICIENT JUSTIFICATION TO REQUEST OR OBTAIN EXTRA COMPENSATION OVER AND ABOVE THE CONTRACT PRICE.

15A 1-3 MATERIAL AND WORKMANSHIP

PROVIDE NEW MATERIAL, EQUIPMENT, AND APPARATUS UNDER THIS CONTRACT UNLESS OTHERWISE STATED HEREIN, OF BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE, AND FREE FROM ANY DEFECTS. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT NECESSARILY INTENDED TO DESIGNATE THE REQUIRED TRIM, WRITTEN DESCRIPTION OF THE OF THE TRIM GOVERN MODEL NUMBERS.

WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE A NEAT AND "WORKMANLIKE" APPEARANCE WHEN COMPLETED, TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER. WORKMANSHIP SHALL BE THE FINEST POSSIBLE BY EXPERIENCED MECHANICS. INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES AND LAWS.

THE COMPLETE INSTALLATION SHALL FUNCTION AS DESIGNED AND INTENDED WITH RESPECT TO EFFICIENCY, CAPACITY, NOISE LEVEL, ECT. ABNORMAL NOISE CAUSED BY BY RATTLING EQUIPMENT, PIPING, DUCTS, AIR DEVICES, AND SQUEAKS IN MOVING COMPONENTS WILL NOT BE ACCEPTABLE. IN GENERAL, MATERIALS AND EQUIPMENT SHALL BE OF COMMERCIAL SPECIFICATION GRADE IN QUALITY. LIGHT DUTY AND RESIDENTIAL TYPE EQUIPMENT WILL NOT BE ACCEPTED.

REMOVE FROM THE PREMISES WASTE MATERIAL PRESENT AS A RESULT OF WORK, INCLUDING CARTONS, CRATING, PAPER, AND STICKERS, ETC. CLEAN EQUIPMENT INSTALLED UNDER THIS CONTRACT TO PRESENT A NEAT AND

CLEAN INSTALLATION AT THETERMINATION OF THE WORK.

REPAIR OR REPLACE PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS

CONTRACT TOTHE SATISFACTION OF AUTHORITIES AND REGULATIONS HAVING JURISDICTION.

15A 1-4 COORDINATION

COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT THE VARIOUS COMPONENTS OF THE SYSTEMS WIL BE INSTALLED AT THE PROPER TIME, WILL FIT THE AVAILABLE SPACE, AND WILL ALLOW PROPER SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.

UNLESS OTHERWISE INDICATED, THE GENERAL CONTRACTOR WILL PROVIDE CHASES AND OPENINGS IN BUILDING CONSTRUCTION REQUIRED FOR INSTALLATION OF THE SYSTEMS SPECIFIED HEREIN. CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE BUILDING, AS VARIATIONS MAY OCCUR. CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS THAT COULD HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.

PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF CEILING, WALL, OR FLOOR FINISHES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT INTENDED TO DESIGNATE THE REQUIRED TRIM.

15A 1-5 ORDINANCES AND CODES

WORK PERFORMED UNDER THIS CONTRACT SHALL, AT MINIMUM, BE IN CONFORMANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES HAVING JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INSTALLATION WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ANY AMENDMENTS AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), UNDERWRITERS LABORATORIES (UL), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS (ASHRAE), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) AND OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE. WHERE THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THERE REFERENCED CODES, STANDARDS, ETC., THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE.

PROCURE AND PAY FOR PERMITS AND LICENSES REQUIRED FOR THE ACCOMPLISHMENT OF THE WORK HEREIN DESCRIBED. WHERE REQUIRED, OBTAIN, PAY FOR AND FURNISH CERTIFICATES OF INSPECTION TO OWNER. CONTRACTOR WILL BE HELD RESPONSIBLE FOR VIOLATIONS OF THE LAW.

15A 1-6 PROTECTION OF EQUIPMENT AND MATERIALS

STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS DELIVERED TO JOB SITE. COVER WITH WATERPROOF, TEAR-RESISTANT, HEAVY TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER, DIRT, PAINT, WATER, OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT HAS BEEN DAMAGED BY CONSTRUCTION ACTIVATES WILL BE REJECTED, AND CONTRACTOR IS OBLIGATED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A LIKE KIND.

KEEP PREMISES ROOM CLEAN FROM FOREIGN MATERIAL CREATED DURING WORK PERFORMED UNDER THIS CONTRACT. PIPING, EQUIPMENT, ETC., SHALL HAVE A NEAT AND CLEAN APPEARANCE AT THE TERMINATION OF THE WORK.

PLUG OR CAP OPEN ENDS OF DUCTWORK AND PIPING SYSTEMS WHILE STORED OR INSTALLED DURING CONSTRUCTION WHEN NOT IN USE TO PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS.

KEEP THE MANUFACTURER PROVIDED PROTECTIVE COVERING ON FLOOR DRAINS, FLOOR SINKS, AND TRENCH DRAINS DURING CONSTRUCTION. REMOVE COVERINGS AT THE TERMINATION OF THE WORK AND POLISH EXPOSED SURFACES.

15A 1-7 OPERATION AND MAINTENANCE INSTRUCTIONS

COLLECT AND COMPILE A COMPLETE BROCHURE OF FIXTURES, MATERIALS, AND EQUIPMENT FURNISHED AND INSTALLED ON THIS PROJECT. INCLUDE OPERATIONAL AND MAINTENANCE INSTRUCTIONS, MANUFACTURER'S CATALOG SHEETS, WIRING DIAGRAMS, PARTS LISTS, APPROVED SHOP DRAWINGS, AND DESCRIPTIVE LITERATURE FURNISHED BY THE MANUFACTURER. INCLUDE AN INSIDE COVER SHEET THAT LISTS THE PROJECT NAME, DATE, OWNER, ARCHITECT, ENGINEER, GENERAL CONTRACTOR, SUBCONTRACTOR, AND AN INDEX OF CONTENTS.

SUBMIT COPIES OF LITERATURE BOUND IN APPROVED BINDERS TO THE ARCHITECT AND OWNER AT THE TERMINATION OF THE WORK. PAPER CLIPS, STAPLES, RUBBER BANDS, AND MAILING ENVELOPES ARE NOT CONSIDERED APPROVED BINDERS. FINAL APPROVAL OF PLUMBING SYSTEMS WILL BE WITHHELD UNTIL THIS EQUIPMENT BROCHURE IS DEEMED COMPLETE BY THE ARCHITECT, ENGINEER, AND OWNER.

15A 1-8 WARRANTIES

WARRANT EACH SYSTEM AND EACH ELEMENT THEREOF AGAINST ALL DEFECTS DUE TO FAULTY WORKMANSHIP, DESIGN OR MATERIAL FOR A PERIOD OF 12 MONTHS FROM DATE OF SUBSTANTIAL COMPLETION, UNLESS SPECIFIC ITEMS ARE NOTED TO CARRY A LONGER WARRANTY IN THE CONSTRUCTION DOCUMENTS OR MANUFACTURER'S STANDARD WARRANTY EXCEEDS 12 MONTHS. REMEDY ALL DEFECTS, OCCURRING WITHIN THE WARRANTY PERIOD(S) STATED IN THE GENERAL CONDITIONS AND DIVISION 1.

WARRANTIES SHALL INCLUDE LABOR AND MATERIAL. MAKE REPAIRS OR REPLACEMENTS WITHOUT ANY ADDITIONAL COST TO THE OWNER.

PERFORM THE REMEDIAL WORK PROMPTLY, UPON WRITTEN NOTICE FROM THE ENGINEER OR OWNER.

AT THE TIME OF SUBSTANTIAL COMPLETION, DELIVER TO THE OWNER ALL WARRANTIES, IN WRITING AND PROPERLY EXECUTED, INCLUDING TERM LIMITS FOR WARRANTIES EXTENDING BEYOND THE ONE YEAR PERIOD, EACH WARRANTY INSTRUMENT BEING ADDRESSED TO THE OWNER AND STATING THE COMMENCEMENT DATE AND TERM

15A 1-9 CUTTING AND PATCHING

PERFORM CUTTING OF WALLS, FLOORS, CEILINGS, ETC. AS REQUIRED TO INSTALL WORK UNDER THIS SECTION. OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO CUTTING. DO NOT CUT OR DISTURB STRUCTURAL MEMBERS WITHOUT PRIOR APPROVAL FROM THE ARCHITECT. CUT HOLES AS SMALL AS POSSIBLE. GENERAL CONTRACTOR SHALL PATCH WALLS, FLOORS, ETC. AS REQUIRED BY WORK UNDER THIS SECTION. PATCHING SHALL MATCH THE ORIGINAL MATERIAL AND CONSTRUCTION. REPAIR AND REFINISH AREAS DISTURBED BY WORK TO THE CONDITION OF ADJOINING SURFACES IN A MANNER SATISFACTORY TO THE ARCHITECT.

15A 1-10 ROUGH-IN

COORDINATE WITHOUT DELAY ROUGHING-IN WITH GENERAL CONSTRUCTION. CONCEAL PIPING AND CONDUIT ROUGH-IN EXCEPT IN UNFINISHED AREAS AND WHERE OTHERWISE SHOWN.

15A 1-11 STRUCTURAL STEEL

STRUCTURAL STEEL USED FOR PIPE SUPPORTS, EQUIPMENT SUPPORTS, ETC., SHALL BE NEW, CLEAN, AND CONFORM TO ASTM DESIGNATION A-36.

SUPPORT PLUMBING AND MECHANICAL EQUIPMENT AND PIPING FROM THE BUILDING STRUCTURE. DO NOT SUPPORT PLUMBING EQUIPMENT FORM CEILINGS, OTHER MECHANICAL OR ELECTRICAL COMPONENTS, AND OTHER NON-STRUCTURAL ELEMENTS.

15A 1-12 ACCESS DOORS

PROVIDE ACCESS DOORS IN CEILING AND WALLS WHERE INDICATED OR REQUIRED FOR ACCESS TO CONCEALED VALVES AND EQUIPMENT INSTALLED UNDER THIS SECTION. PROVIDE CONCEALED HINGES, SCREWDRIVER-TYPE LOCK, ANCHOR STRAPS MANUFACTURED BY MILCOR, ZURN, TITUS, OR EQUAL. OBTAIN ARCHITECT'S APPROVAL OF TYPE, SIZE, LOCATION, AND COLOR BEFORE ORDERING.

15A 1-13 PENETRATIONS

SEAL FLOOR, EXTERIOR WALL, AND ROOF PENETRATIONS WATER AND WEATHERTIGHT WITH APPROPRIATE NON-SHRINK, NON-HARDENING COMMERCIAL CONSTRUCTION SEALANT. SEAL ROOF PENETRATIONS WITH 4 POUND PER SQUARE FOOT LEAD FLASHING. PROVIDE A SLEEVE, AND SEAL NON-FIRE-RATED FLOOR AND WALL PENETRATIONS WITH FIBERGLASS PACKING ND SILICONE CAULK (FOR ACOUSTICAL INSULATION).

COORDINATE FIRE RATING REQUIREMENTS AND LOCATIONS WITH THE ARCHITECT. SEAL PENETRATIONS OF FIRE-RATED ASSEMBLIES WITH 3M CP-25 FIRE BARRIER CAULK (PROVIDE THICKNESS AND METHOD AS REQUIRED AND RECOMMENDED BY MANUFACTURER) TO MAINTAIN THE FIRE RESISTANCE RATING OF FIRE-RATED ASSEMBLIES.

SEAL EXTERIOR WALL PENETRATIONS BELOW GRADE WITH CAST IRON WALL PIPES AND MODULAR MECHANICAL SLEEVE SEALS, MANUFACTURED BY THUNDERLINE/LINK SEAL, CALPICO, INC AND METRAFLEX.

PROVIDE SLEEVES FOR HORIZONTAL PIPE PASSING THROUGH OR UNDER FOUNDATION. SLEEVES SHALL BE CAST IRON SOIL PIPE TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED.

PROVIDE SLEEVES FOR VERTICAL PIPE PASSING THROUGH SLAB ON GRADE, SLEEVES SHALL BE SCHEDULE 40 PVC PIPE, TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED. SEAL WATER-TIGHT WITH SILICONE CAULK.

15C 1-1 PIPING MATERIALS

MATERIALS SPECIFIED OR NOTED ON THE DRAWINGS ARE SUBJECT TO THE APPROVAL OF LOCAL CODE AUTHORITIES. VERIFY APPROVAL BEFORE INSTALLING ANY MATERIAL OR JOINING METHOD.

DOMESTIC WATER (COLD, HOT, SOFT): DOMESTIC WATER PIPING INSTALLED ABOVE THE FLOOR SLAB INSIDE THE BUILDING SHALL BE TYPE "L" HARD TEMPER COPPER TUBE WITH WROUGHT COPPER.

FITTINGS AND SOLDERED CONNECTIONS MADE UP WITH 95/5 SOLDER. BRAZED MECHANICALLY FORMED TEE CONNECTIONS (T-DRILL) MAY BE USED IN COPPER LINES WHERE APPROVED BY CODE CONNECTION SHALL BE MADE WITH BRAZED SILVER SOLDER (SILFOS) JOINTS IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS.

UNDERGROUND DOMESTIC WATER PIPING SHALL BE TYPE "K" SOFT TEMPER COPPER TUBING WITH FLARED COPPER ALLOY FITTINGS AND CONNECTIONS, OR TYPE "K" HARD TEMPER COPPER TUBING WITH CONVENTIONAL WROUGHT COPPER FITTINGS AND SILVER SOLDER (SILFOS) JOINTS. INSTALL AS FEW UNDERGROUND COPPER PIPING JOINTS AS POSSIBLE. AT BUILDING SERVICE ENTRANCE, NO JOINTS SHALL BE INSTALLED UNDER OR WITHIN 5 FEET OF THE BUILDING. INSTALL DOMESTIC WATER PIPING BELOW GRADE OUTSIDE BUILDING AT ADEQUATE DEPTH TO PREVENT FREEZING.

INTERIOR WASTE AND VENT BELOW SLAB, WASTE AND AVERT PIPE BELOW SLAB INSIDE BUILDING SHALL BE STANDARD WEIGHT CAST IRON SOIL PIPE WITH HUB AND SPIGOT FITTINGS WITH NEOPRENE GASKET JOINTS. HUBLESS WASTE AND VENT PIPE IS NOT PERMITTED BELOW BASE SLAB. PVC DWV PIPE WITH SOCKET FITTINGS AND SOLVET WELD JOINTS IS ALSO PERMITTED WHERE APPROVED BY CODE. INTERIOR WASTE AND VENT ABOVE SLAB: WASTE AND VENT PIPE ABOVE SLAB INSIDE BUILDING SHALL BE HUBLESS CAST IRON SOIL PIPE AND FITTINGS WITH HUBLESS COUPLINGS. PVC DWV PIPE WITH SOCKET FITTINGS AND SOLVENT WLD JOINTS IS ALSO PERMITTED WHERE APPROVED BY CODE AND LOCAL AUTHORITY HAVING JURISDICTION.

INDIRECT AND CONDENSATE DRAIN INSIDE BUILDING: INDIRECT AND CONDENSATE DRAIN PIPE INSTALLED INSIDE THE BUILDING SHALL BE TYPE "M" HARD COPPER WITH WROUGHT COPPER FITTINGS FOR 1" AND SMALLER AND "DWV" COPPER WITH WROUGHT COPPER DRAINAGE PATTERN FITTINGS FOR 1-1/4" AND LARGER HARD TEMPER COPPER TUBE AND SOLDERED CONNECTIONS MADE WITH 95/5 SOLDER. INSTALL CLEANOUTS AT ELBOWS GREATER THAN 45 DEGREES. GAS PIPING: SCHEDULE 40 BLACK CARBON STEEL WITH MALLEABLE IRON THREADED FITTINGS. PAINT ALL GAS PIPING EXPOSED TO WEATHER WITH ONE COAT OF PRIMER, AND TWO COATS OF RUST-PROOF PAINT. COLOR SHALL MATCH BUILDING COLORS. COORDINATE WITH GENERAL CONTRACTOR.

15C 1-2 PIPING AND EQUIPMENT INSULATION

DOMESTIC COLD WATER, HOT WATER, INDIRECT AND CONDENSATE DRAIN PIPE (WITHIN BUILDING): 1" ONE-PIECE FIBERGLASS COVERING WITH FIRE-RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINTEED, OWENS-CORNING OR ARMSTRONG. FOR PIPING AT HANGERS PROVIDE 8" LONG SECTIONS OF HIGH DENSITY, HIGH TEMPERATURE CALCIUM SILICATE BY JOHNS-MANVILLE, FIBERGLASS BY KNAUF, OR 8" LONG STYROFOAM BILLETS BY DOW. INSULATION SHALL BE CONTINUOUS ALONG THE PIPE SURFACE, EXCEPT AT VALVES. UNIONS, AND WHERE PIPING IS EXPOSED AT FIXTURES.

FOR HOT AND COLD WATER PIPING INSTALLED INSIDE MASONRY UNITS OF WALLS, PROVIDE 1" FLEXIBLE UNICELLULAR INSULATION BY ARMACELL.

COVER FITTINGS WITH ZESTON, KNAUF, OR EQUAL ONE-PIECE PVC PREMOLDED INSULATING COVERS. FITTING COVERS, JACKETS AND ADHESIVES SHALL NOT EXCEED FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPMENT RATING OF 50 PER ASTM E84. AT ALL ELBOWS AND TEES, FILL VOIDS BETWEEN COVERS AND PIPING WITH FIBERGLASS INSULATION AND TAPE JOINTS. INSTALL PIPE INSULATION IN COMPLIANCE WHIT MANUFACTURER'S RECOMMENDATIONS. WHERE PREMOLDED INSULATING FITTINGS ARE NOT APPROVED BY LOCAL AUTHORITIES, MITER INSULATION AT FITTINGS.

15C 1-3 PIPING INSTALLATION

GENERAL: CLEAN PIPE THOROUGHLY PRIOR TO INSTALLATION. REAM ENDS OF PIPE TO REMOVE BURRS. CUT PIPE ACCURATELY TO MEASUREMENTS TAKEN ON THE JOB. INSTALL WITH ADEQUATE CLEARANCE FOR INSTALLATION OF COVERINGS WHERE REQUIRED. PIPE SHALL NOT BE SPRUNG OR BENT. NEATLY ALIGN PIPE, CONNECT IT SECURELY, AND SUPPORT IT FROM THE BUILDING STRUCTURE WITH HANGERS AS SPECIFIED BELOW. PROVIDE CHROME-PLATED ESCUTCHEONS ON PIPES PASSING THROUGH CEILINGS, FLOORS OR WALLS OF FINISHED SPACES. RUN PIPES FREELY THROUGH FLOOR AND WALL PENETRATIONS USING PIPE SLEEVES. DO NOT GROUT IN PLACE UNLESS REQUIRED FOR STRUCTURAL FIRE INTEGRITY. INSTALL PIPE CONCEALED IN FINISHES SPACES WHEREVER POSSIBLE. USE A DIELECTRIC UNION WHERE FERROUS AND COPPER PIPE CONNECT. DIELECTRIC UNION SHALL HAVE A ZINC-PLATED STEEL BODY, A THREADED NYLON INSERT, AND INSULATING PRESSURE GASKET. NO FERROUS METAL-TO-COPPER CONNECTION MADE WITHOUT INSULATING UNIONS WILL BE ALLOWED.

HANGER SUPPORTS: PIPE HANGERS SHALL BE AS DESCRIBED IN THE SPECIFICATIONS BY B-LINE OR EQUAL BY ANVIL, MICHIGAN, TRUSCON, OR UNISTRUT. CONNECT HANGERS TO THE STRUCTURE WITH SIDE BEAM CONNECTORS AND ALL THREAD HANGER ROD. PROVIDE ENGINEERED SUPPORT STRUTS BETWEEN JOISTS AND OTHER STRUCTURAL MEMBERS AS REQUIRED TO PROVIDE A RIGID HANGING INSTALLATION. DO NOT HANG PIPES FROM OTHER PIPES, CONDUIT OR DUCTWORK. PROVIDE HANGER RODS AND SPACE HANGERS AT INTERVALS AS REQUIRED.

SOIL, WASTE AND STORM: GRADE SOIL AND WASTE PIPING TO A UNIFORM SLOPE OF NOT LESS THAN 1/8" PER FOOT FOR PIPING 4" OR LARGER, AND NOT LESS THAN 1/4" PER FOOT FOR PIPING 3" OR SMALLER. SLOPE STORM PIPING AT 1/8" PER FOOT. LAY PIPE AT UNIFORM SLOPE, FREE FROM SAGS, WITH HUB END UPSTREAM. SUPPORT PIPE AT EACH JOINT. MAKE CHANGES IN DIRECTION FROM HORIZONTAL TO VERTICAL, AT FIXTURE BRANCHES AND OTHER BRANCH CONNECTION WITH SANITARY "TEES" OR SHORT SWEEP "ELLS". MAKE CHANGES IN DIRECTION FROM VERTICAL TO HORIZONTAL OR IN THE HORIZONTAL WITH LONG RADIUS FITTINGS, LONG SWEEPING "ELLS", COMBINATION "Y" FITTINGS, OR 45 DEGREE "ELLS" (1/8 BEND FITTINGS) AND "Y" FITTINGS.

DOMESTIC WATER: ARRANGE COLD, HOT AND HOT WATER RECIRCULATION PIPING TO DRAIN AT THE LOWEST POINT IN EACH SYSTEM. INSTALL AT LEAST ONE PIPE UNION ADJACENT TO ALL SHUTOFF VALVES, AT CONNECTION POINT OF EACH PIECE OF EQUIPMENT, AND ELSEWHERE IN THE SYSTEM WHERE REQUIRED TO ALLOW PROPER MAINTENANCE. PROVIDE UNIONS OF THE GROUND JOINT TYPE. MAKE ALLOWANCE FOR EXPANSION AND CONTRACTION WHERE REQUIRED BY THE INSTALLATION. WHERE WATER PIPING OCCURS IN EXTERIOR WALLS, HOLD PIPE AS CLOSE AS POSSIBLE TO THE INTERIOR FACE OF WALL AND INSTALL INSULATION BATT OR OTHER INSULATION (MINIMUM R8) BETWEEN PIPING AND THE EXTERIOR WALL FACE.

15C 1-4 SYSTEM TESTING AND ADJUSTING

UPON COMPLETION OF EACH PHASE OF THE INSTALLATION, TEST EACH SYSTEM IN CONFORMANCE WITH LOCAL CODE REQUIREMENTS AND LANDLORD CRITERIA. FURNISH LABOR AND EQUIPMENT REQUIRED TO TEST PLUMBING WORK INSTALLED UNDER THIS CONTRACT, AND ASSUME COST INVOLVED IN MAKING THE TESTS, AND REPAIRING AND/OR REPLACING DAMAGE RESULTING THERE FROM.

NOTIFY THE ARCHITECT AND THE AUTHORITY HAVING JURISDICTION, THREE (3) WORKING DAYS PRIOR TO MAKING PLUMBING SYSTEM TEST. LEAVE CONCEALED WORK UNCOVERED UNTIL THE REQUIRED TEST HAVE BEEN COMPLETED, BUT IF NECESSARY DUE TO CONSTRUCTION PROCEDURE, TEST ON PORTIONS OF THE WORK MAY BE MADE, AND WHEN SATISFACTORY, THE WORK MAY BE CONCEALED. TEST PIPING BEFORE INSULATION IS INSTALLED, AND BEFORE BACKFILL. PIPES, JOINTS, FLANGES, VALVE STEMS, ETC. SHALL BE LEAK TIGHT. REPAIR OR REPLACE SYSTEM DEFECTS WITH NEW MATERIALS. CAULKING OF DEFECTIVE JOINTS, CRACKS OR HOLES WILL NOT BE PERMITTED. REPEAT EST AFTER DEFECTS HAVE BEEN ELIMINATED. MAKE TESTS IN THE PRESENCE OF THE ADMINISTRATIVE AUTHORITY AND/OR THE OWNER'S

15C 1-5 GUARANTEE

THE WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL INCLUDE THE FURNISHING, INSTALLATION, AND CONNECTION OF PLUMBING SYSTEMS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. BY SIGNING THE CONTRACT, THE CONTRACTOR ACKNOWLEDGES THAT HE HAS ACQUAINTED HIMSELF WITH THE SITE AND THE EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, AND THE DRAWINGS AND SPECIFICATIONS PERTAINING THERETO, AND HE INDICATES THAT HE WILL COMPLY WITH THE REQUIREMENTS AND INTENT OF PERTINENT DOCUMENTS IN THE PERFORMANCE OF THE WORK.

GUARANTEE THAT THE PLUMBING INSTALLED UNDER THIS CONTRACT IS FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ON (1) YEAR FROM THE DATE OF JOB ACCEPTANCE BY THE OWNER. THIS SHALL INCLUDE A GUARANTEE OF FREE CIRCULATION OF LIQUIDS THROUGHOUT THE SYSTEM AS INTENDED WITHOUT LEAKS. EXCESSIVE NOISE, OR WATER HAMMER.

IF DEFECTS OCCUR DURING THE ONE YEAR GUARANTEE PERIOD, REPAIR OR REPLACE SUCH DEFECTS AT NO EXPENSE TO THE OWNER, AND TO THE SATISFACTION OF THE OWNER, ARCHITECT AND ENGINEER.

PLUMBING GENERAL NOTES:

- 1. PLANS ARE SCHEMATIC IN NATURE & INTENDED TO DEPICT GENERAL SCOPE OF PROJECT. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION AND COORDINATE WITH OTHER TRADES PRIOR TO INSTALLATION. ALL WORK SHALL BE CLOSELY COORDINATED WITH G.C. PRIOR TO PURCHASE, FABRICATION & INSTALLATION.
- 2. CONSTRUCTION PER ALL APPLICABLE CODES & STANDARDS. CODES GOVERN UPON ANY DISCREPANCIES WITH THE PLANS
- 3. ALL MATERIAL AND EQUIPMENT SHALL BE NEW AND OF THE BEST QUALITY, AND BE PRODUCED BY REPUTABLE MANUFACTURER'S USED IN COMMERCIAL CONSTRUCTION.
- 4. SUBMIT OPERATION AND MAINTENANCE MANUALS TO GC UPON COMPLETION OF PROJECT.
- PROVIDE GUARANTEE ON ALL EQUIPMENT, MATERIAL AND WORKMANSHIP FOR ONE YEAR UPON COMPLETION OF PROJECT. ANY DEFECTS ARISING WITHIN ONE YEAR SHALL BE REPAIRED OR REPLACED AT NO COST TO THE OWNER.
- 6. TEST ALL PIPING IN ACCORDANCE WITH LOCAL CODES AND STANDARDS.
- 7. <u>DO NOT</u> ROUTE ANY PIPING ABOVE ELECTRICAL PANELS, TRANSFORMERS & EQUIPMENT NOR BELOW MECHANICAL EQUIPMENT COORDINATE WITH E.C. AND M.C.
- 8. ROUTE ALL PIPING ON 'WARM' SIDE OF INSULATION WITHIN A CONDITIONED SPACE G.C. SHALL PROVIDE A 'FURR-OUT; THICKENED WALL OR DROPPED SOFFIT AS REQUIRED. PIPING SHALL NOT BE ROUTED IN UNCONDITIONED SPACES, ATTICS, CRAWL SPACES, EXTERIOR WALLS, EXTERIOR SOFFITS, OR EAVES. ETC. WITHOUT THE ENGINUITY LCC. WRITTEN APPROVAL.
- 9. INSTALL ACCESSIBLE SHUT-OFF VALVES AS SHOWN ON PLANS & AS NECESSARY FOR MAINTENANCE TO FIXTURES AND EQUIPMENT. COORDINATE LOCATION OF ALL VALVES WITH G.C. TO ENSURE ACCESSIBILITY.
- 10. PROVIDE FLOOR RECEPTOR WITH DEEP SEAL TRAP & A CW TRAP PRIMER CONNECTION OR 'TRAP GUARD' PER LOCAL AUTHORITY HAVING JURISDICTION (AHJ).
- 11. WASTE & VENT PIPING SHALL BE PVC OR ABS-DWV PIPING WITH APPROVED SOLVENT CEMENTED FITTINGS WASTE PIPING SHALL HAVE MINIMUM 1/4" PER FOOT SLOPE. CONDENSATE PIPING SHALL BE PVC WITH 1" PER 10'-0" SLOPE.
- 12. DOMESTIC WATER PIPING SHALL BE COPPER (TYPE 'L' MINIMUM) TYPE 'L' ABOVE GRADE AND INSIDE BUILDING, TYPE 'K' BELOW GRADE. PEX PIPING CAN BE USED INSIDE BUILDING IN LIEU OF COPPER. PEX SYSTEM MUST BE SUBMITTED FOR REVIEW AS A SHOP DRAWING SUBMITTAL. THIS INCLUDES, BUT IS NOT LIMITED TO, PIPING, MANIFOLD FITTING, VALVES, SUPPORTS, ANCHORS & SLEEVES.
- 13. DOMESTIC WATER PIPING SHALL BE INSULATED WITH FIBERGLASS RIGID INSULATION OR APPROVED FOAM INSULATION ARMSTRONG OR OWENS CORNING. SEAL ALL ENDS, JOINTS & FITTINGS. HW SHALL HAVE 1" THICKNESS & CW SHALL HAVE 3/4" THICKNESS.
- 14. MAINTAIN A MINIMUM OF 10' BETWEEN FRESH AIR INTAKE AND EXHAUST/ VENT TERMINATIONS. WHERE THEY ARE WITHIN 10', FRESH AIR INTAKE SHALL BE LOCATED 2' (min.) BELOW EXHAUST/VENT TERMINATION. FIELD VERIFY ACTUAL REQUIREMENTS PRIOR TO ROUGH-IN.
- 15. PROVIDE CLEANOUTS AS SHOWN ON PLANS AND AS REQUIRED BY CODE. MAINTAIN ACCESS FOR SERVICE.
- 16. ACTUAL LOCATION OF PLUMBING EQUIPMENT, FIXTURES & DEVICES PER G.C. COORDINATE PRIOR TO ROUGH-IN
- 17. REFER TO PLUMBING FIXTURE SCHEDULE FOR SIZE OF DOMESTIC WATER, WASTE & VENT PIPING SERVING
- 18. PIPING SUPPORTS, HANGERS & ANCHORS PER LATEST ADOPTED CODE.
- 19. IT IS THE RESPONSIBILITY OF THE P.C. TO FIELD VERIFY ACTUAL LOCATION, FLOW ELEVATION & CONNECTION REQUIREMENTS OF SITE UTILITIES PRIOR TO SUBMITTING A BID & START OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE SITE UTILITIES & THE PLANS SHALL BE ADDRESSED WITH THE G.C. & COORDINATED WITH ENGINUITY,

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 Project No:
 61P000006.3

 Drawn By:
 EAI

 Checked By:
 AB

PLUMBING SPECIFICATIONS

P5.0

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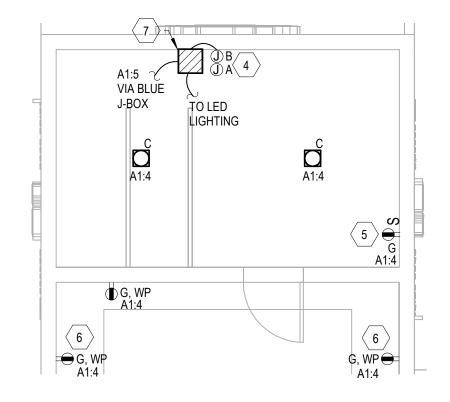
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ELECTRICAL COOLER KEYNOTES

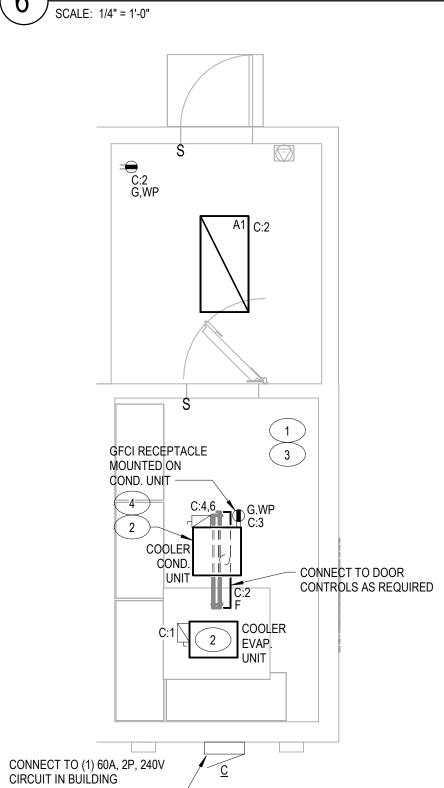
- . REMOTE COOLER IS FURNISHED BY MANUFACTURER AND DELIVERED TO SITE. SITE ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND ELECTRICAL CONNECTION REQUIREMENTS WITH COOLER PROVIDED. CONNECT TO PANEL "C" PER CIRCUIT NOTED ON DRAWINGS.
- 2. COOLER CONDENSING UNIT (ON ROOF) AND EVAPORATOR UNIT ARE PROVIDED AND SHIPPED TO SITE BY MANUFACTURER. INSTALLATION TO BE COMPLETED BY ON-SITE MECHANICAL CONTRACTOR. ELECTRICAL CONNECTION TO PANEL "C" TO BE COMPLETED BY ON-SITE ELECTRICAL CONTRACTOR. COORDINATE FINAL INSTALLATION LOCATION WITH ON-SITE GENERAL CONTRACTOR. CONNECT PER MANUFACTURER'S WRITTEN
- 3. ON-SITE ELECTRICAL CONTRACTOR TO PROVIDE HEAT TAPE AND HEAT TRACE ON ALL CONDENSATE PIPING. COORDINATE ROUTING AND TERMINATION WITH ON-SITE GENERAL CONTRACTOR. INSTALL AND CONNECT TO CIRCUIT #5 (HEAT TAPE) AND CIRCUIT #7 (HEAT TRACE) IN PANEL "C" PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 4. RECEPTACLE MOUNTED TO CONDENSING UNIT. VERIFY EXACT LOCATION WITH MECHANICAL CONTRACTOR OR EQUIPMENT VENDOR PRIOR TO ROUGH-IN.

ELECTRICAL KEYNOTES (#)

- 1. ROOF TOP UNIT "RTU-1" IS FURNISH AS PART OF THE MODULAR BUILDING ASSEMBLY PACKAGE AND INSTALLED ON SITE. ELECTRICAL IS ROUGH-IN ONLY, FEEDER FROM CIRCUIT BREAKER IN PANEL, CONDUIT AND WIRE, IS INSTALLED UP TO ROOF AREA AND CAPPED ABOVE CEILING FOR SHIPPING. SITE ELECTRICAL CONTRACTOR TO EXTEND FEEDER THRU ROOF, FURNISH & INSTALL DISCONNECT SWITCH AND PROVIDE FINAL CONNECTIONS. REFERENCE SHEET "E2.0" FOR MORE INFORMATION.
- 2. ROOF MOUNTED ICE MACHINE CONDENSER IS FURNISHED AND INSTALLED ON SITE BY OTHERS. ELECTRICAL IS ROUGH-IN ONLY, FEEDER FROM CIRCUIT BREAKER IN PANEL, CONDUIT AND WIRE, AND CAPPED FOR SHIPPING. SITE ELECTRICAL CONTRACTOR TO PROVIDE DISCONNECT SWITCH AND MAKE FINAL
- 3. PROVIDE JUNCTION BOX IN CRAWL SPACE ON UNDERSIDE OF FLOOR AND CONNECT TO EXISTING CONDUIT STUB-OUT FROM SWITCH IN RESTROOM. FURNISH AND INSTALL CRAWL SPACE LIGHT AND CONNECT TO EXISTING SWITCH LEG OF CIRCUIT. FURNISH AND INSTALL (2) GFCI RECEPTACLES WITH IN-USE WEATHERPROOF COVERS MOUNTED IN CRAWL SPACE ON UNDERSIDE OF FLOOR, (1) FOR SUMP PUMP CONNECTION AND (1) FOR HEAT TRACE CONNECTION. CONNECT UNSWITCHED TO EXISTING CRAWL SPACE
- 4. TWO 4" X 4" JUNCTION BOXES, PAINTED BLUE FOR LED DRIVERS AND RED FOR POWER, FURNISHED WITH MODULAR BUILDING ASSEMBLY AND MOUNTED ON BACK WALL OF MUFFIN TOP FOR CONNECTION OF ALL ATTIC ELECTRICAL CIRCUITS. SITE ELECTRICAL CONTRACTOR TO CONNECT PROVIDED FEEDER IN BASE BUILDING, STUBBED THRU ROOF TO THE BOXES AS REQUIRED.
- 5. SWITCH FOR ATTIC LIGHTS AND GFCI RECEPTACLE TO BE MOUNTED 48" A.F.F. TO TOP ABOVE ATTIC FLOOR.
- 6. ROOFTOP RECEPTACLES TO BE MOUNTED ABOVE CANOPY. REFERENCE ARCHITECTURAL SHEET A4.2 FOR SPECIFIC MOUNTING LOCATIONS.
- 7. TRANSFORMERS / DRIVERS FOR LED NEON-FLEX LIGHTING. COORDINATE FINAL MOUNTING LOCATION IN ATTIC IN FIELD.
- 8. CANOPY HEATER: 24V/1Ø, 40W, CONNECT TO CIRCUIT AS NOTED, INFRARED HEATERS ARE FURNISHED AND INSTALLED BY OTHERS. SITE ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND LOW-VOLTAGE CONNECTION REQUIREMENTS PRIOR TO ROUGH-IN.
- 9. PROVIDE JUNCTION BOX FOR CONNECTION TO LOW-VOLTAGE CANOPY HEATERS. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH MANUFACTURER. ELECTRICAL CONTRACTOR TO PROVIDE TRANSFORMER TO STEP DOWN FROM 120VAC AS NEEDED.

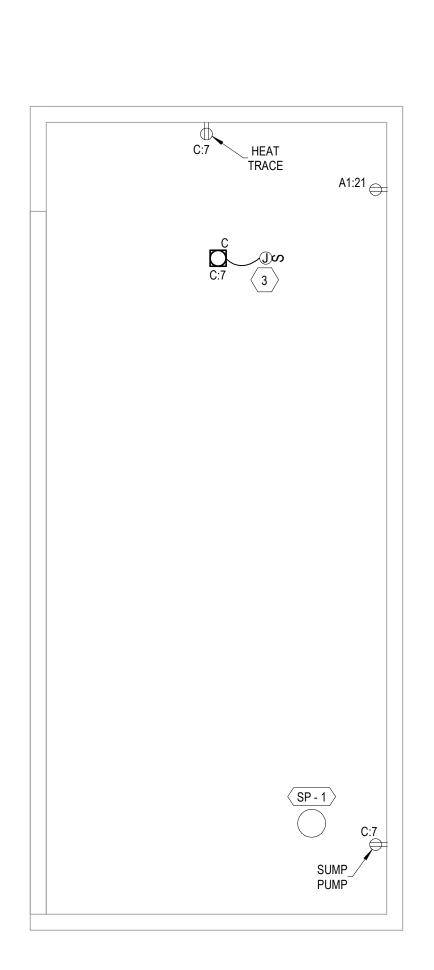


\ ELECTRICAL MUFFIN TOP PLAN

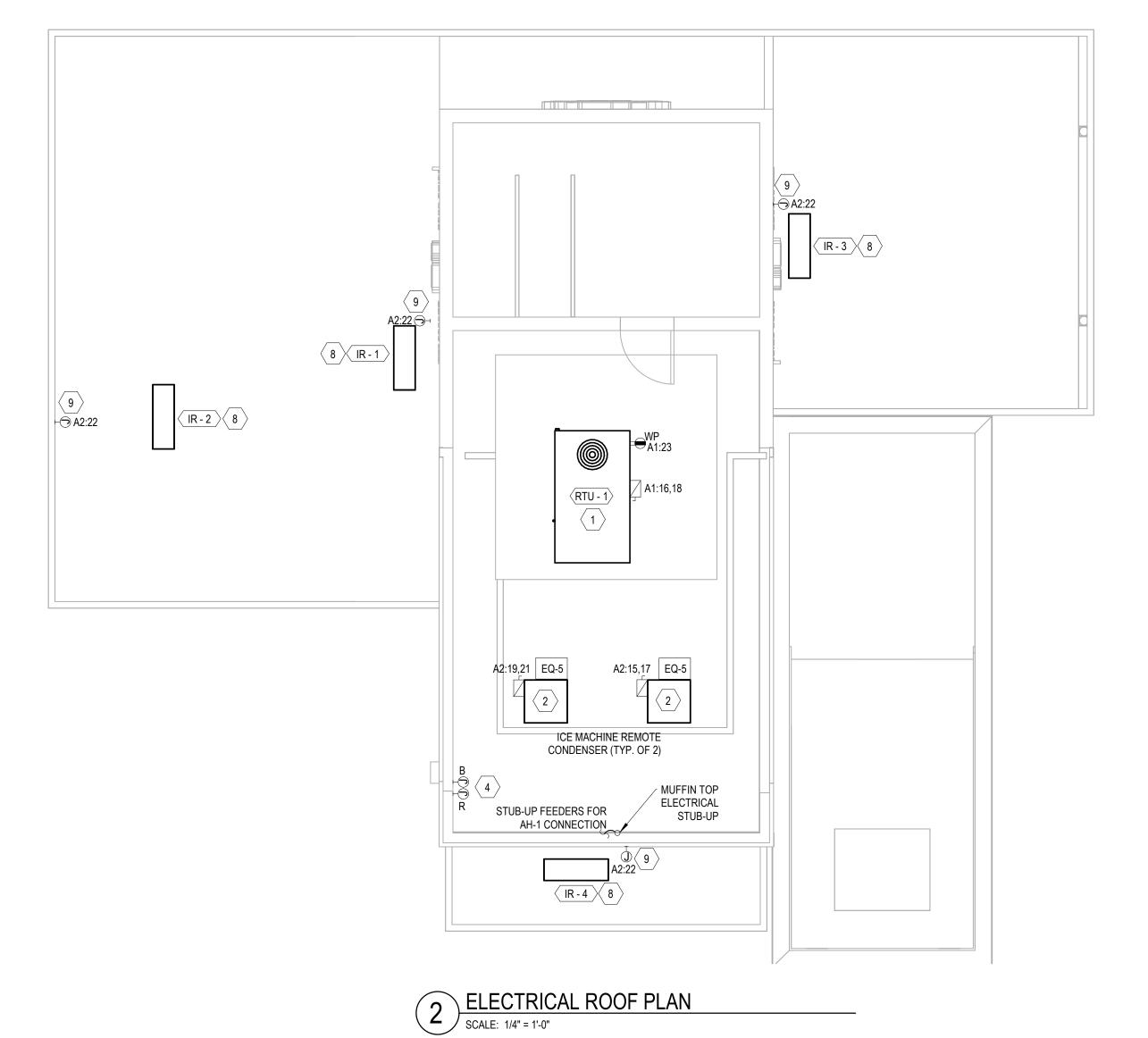


3 ELECTRICAL - STORAGE / COOLER SCALE: 1/4" = 1'-0"

ELECTRICAL PANEL "A1". FIELD VERIFY EXACT ROUTING. ——



ELECTRICAL CRAWLSPACE PLAN SCALE: 1/4" = 1'-0"



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Date Issue/Description

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Checked By:	JTH

ELECTRICAL ROOF / ATTIC & FOUNDATION PLAN (POWER (SITE

E4.0

SITE LIGHTING SCHEDULE

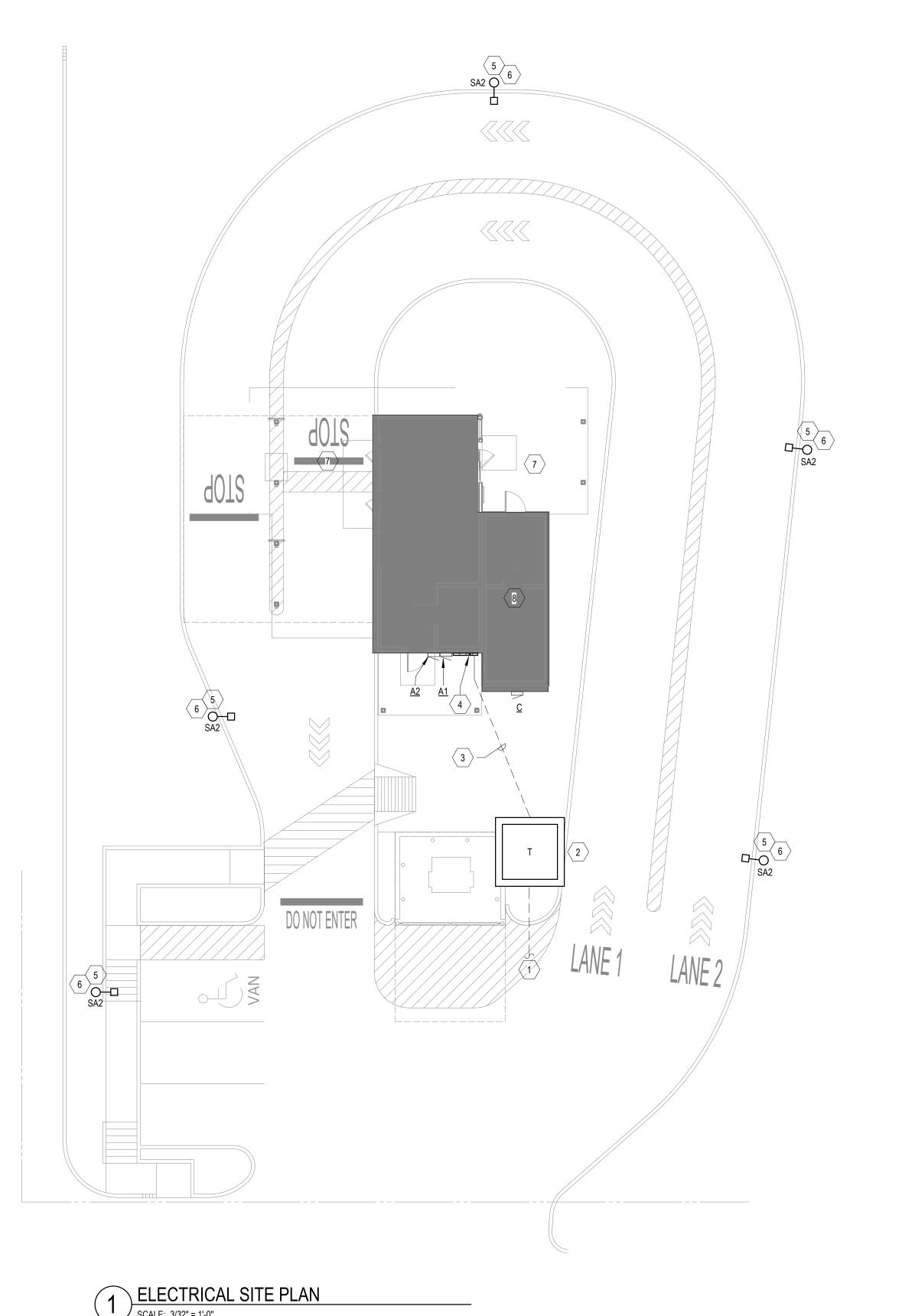
ID	MANUFACTURER	CATALOG NO.	DESCRIPTION	LLF	BUG RATING	BEAM DISTRIBUTION	VOLTAGE	DIMMING	MOUNTING HEIGHT (FT.)	POLE TYPE	FIXTURE AND POLE FINISH	FIXTURE QUANTITY PER POLE	TYPE	WATTS	LUMENS	ССТ	CRI	REMARK
SA2	COOPER	TLM-E04-LED-E1-SL3-HSS	SINGLE HEAD POLE LIGHT W/ SHIELD	1	B2-U0-G2	TYPE III	120/277	0-10V	20	SQUARE	DARK BRONZE	1	LED	97	12,145	5000	70	-

SCALE: 3/32" = 1'-0"

GENERAL NOTES

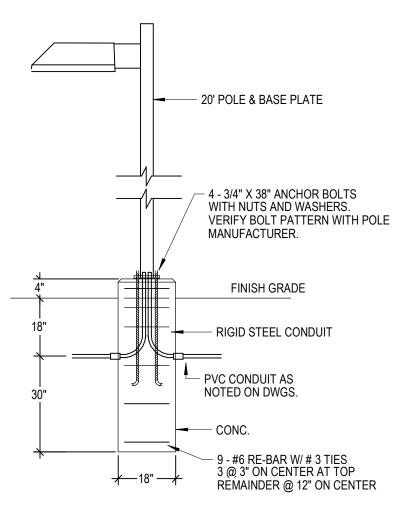
a. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR LUMINAIRES, DRIVERS, AND EMERGENCY BACKUP. b. CONTRACTOR TO VERIFY LUMINAIRE CATALOG NUMBER AND INSTALLATION REQUIREMENTS PRIOR TO ORDERING.

c. POLE TYPE DESCRIPTION (ABC): A - SHAPE, R-ROUND, S-SQUARE; B - PROFILE, S-STRAIGHT, T-TAPERED; C - MATERIAL, A-ALUMINUM, S-STEEL



ELECTRICAL KEYNOTES (#)

- 1. UNDERGROUND ELECTRICAL PRIMARY. VERIFY EXACT REQUIREMNTS WITH UTILITY CO. PRIOR TO ROUGH-IN.
- 2. PAD MOUNTED TRANSFORMER (ASSUMED 50 KVA, 1Ø) BY UTILITY CO. PAD BY G.C. PER UTILITY CO.
- 3. UNDERGROUND ELECTRICAL SECONDARY FROM PAD MOUNTED TRANSFORMER BY SITE ELECTRICAL CONTRACTOR. FIELD VERIFY EXACT REQUIREMENTS & ROUTING WITH LOCAL UTILITY CO. PRIOR TO ROUGH-
- 4. ELECTRIC METER & ELECTRICAL SERVICE PANEL. METER PROVIDED BY SITE ELECTRICAL CONTRACTOR. PANELS PROVIDED WITH BUILDING
- 5. SITE LIGHTING FIXTURE TO BE FURNISHED & INSTALLED BY SITE ELECTRICAL CONTRACTOR.
- 6. CONNECT TO CIRCUIT A1:7 IN MODULAR BUILDING PANEL "A1" WITH 2 No. 12 THHN & 1 No. 12 GROUND IN 1/2" CONDUIT. CONTROL VIA 2 POLE TIMECLOCK, POLE 1 FURNISHED WITH THE MODULAR BUILDING.
- 7. CANOPY LIGHT FIXTURES ARE FURNISHED WITH THE CANOPY AND IS PART OF THE MODULAR BUILDING. THE CANOPY IS SHIPPED SEPARATELY TO BE INSTALLED ON SITE. REFERENCE SHEET E3.0 FOR ADDITIONAL INFORMATION.
- 8. REMOTE COOLER TO BE PROVIDED AND DELIVERED TO SITE FOR INSTALLATION. ELECTRICAL CONTRACTOR TO CONNECT COOLER PANEL TO ASSOCIATED PANEL CIRCUIT BREAKER PER ONE-LINE DIAGRAM. REFER TO ELECTRICAL PLANS FOR ADDITIONAL INFORMATION. REFERENCE SHEETS E1.0 & E4.0.



2 TYPICAL POLE BASE DETAIL
SCALE: NTS

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Checked By:	JTH

ELECTRICAL SITE PLAN (SITE ADAPT)

E4.1

16010.01 - DRAWINGS AND SPECIFICATIONS THE CONTRACT DRAWINGS FOR DIVISION 16 WORK ARE IN PART SCHEMATIC, INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE THE GENERAL LAYOUT, DESIGN AND ARRANGEMENT. THE CONTRACTOR SHALL FOLLOW THESE DRAWINGS IN THE LAYOUT OF HIS WORK AND SHALL CONSULT GENERAL INTENT CONSTRUCTION DRAWINGS, STRUCTURAL DRAWINGS, MECHANICAL DRAWINGS AND ALL OTHER DRAWINGS FOR THIS PROJECT TO DETERMINE ALL CONDITIONS AFFECTING THE DIVISION 16 WORK.

WHERE SPECIFIC DETAILS AND DIMENSIONS FOR DIVISION 16 WORK ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL TAKE MEASUREMENTS AND MAKE LAYOUTS AS REQUIRED FOR THE PROPER INSTALLATION OF THE WORK AND COORDINATION WITH ALL OTHER WORK ON THE PROJECT. IN CASE OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE SPECIFICATIONS THAT HAVE NOT BEEN CLARIFIED BY ADDENDUM PRIOR TO BIDDING, IT SHALL BE ASSUMED BY THE SIGNING OF THE CONTRACT THAT THE HIGHER COST IS INCLUDED IN THE CONTRACT PRICE.

THIS WORK SHALL INCLUDE ALL PLANT, LABOR, MATERIAL AND EQUIPMENT AS REQUIRED TO FURNISH AND INSTALL DIVISION 16 WORK INCLUDING DEMOLITION AS SHOWN ON THE DRAWINGS AND AS HEREINAFTER SPECIFIED. FURNISH AND INSTALL ALL MATERIALS, EQUIPMENT, DEVICES AND ACCESSORIES NOT SPECIFICALLY CALLED FOR BY ITEM BUT THAT ARE NECESSARY TO PROVIDE THE REQUIREMENTS IN OPERATION AND FUNCTION THAT IS ESTABLISHED BY THE DESIGN AND BY THE EQUIPMENT SPECIFIED.

WORK TO INCLUDE THE PROCUREMENT OF AND PAYMENT OF ALL PERMITS AND LICENSES REQUIRED FOR THE PERFORMANCE OF THE WORK. WORK TO INCLUDE ALL FEES AND DIRECT EXPENSES INVOLVED IN ANY INSPECTIONS REQUIRED FOR THE PROJECT. ALL SCAFFOLDS, STAGING, RUNWAYS AND EQUIPMENT REQUIRED FOR THE PERFORMANCE OF THE WORK. THE REMOVAL FROM THE PREMISES, AS IT ACCUMULATES, OF ALL DIRT AND REFUSE

16010.03 - PROTECTION AND DUST CONTROL THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION TO PREVENT DAMAGE TO ADJACENT AREAS, EQUIPMENT, OR FURNISHINGS: TO PREVENT ACCIDENTAL INJURY TO THE BUILDING OCCUPANTS AND THE PUBLIC; TO PREVENT THE SPREADING OF DUST, DIRT, DEBRIS, AND MOISTURE FROM GETTING ON OR IN THE BUILDING OCCUPANTS FURNISHINGS OR EQUIPMENT.

EACH BIDDER SHALL INSPECT THE SITE AS REQUIRED FOR KNOWLEDGE OF EXISTING CONDITIONS AND FAILURE TO OBTAIN SUCH KNOWLEDGE SHALL NOT RELIEVE THE SUCCESSFUL BIDDER OF THE RESPONSIBILITY TO MEET THE EXISTING CONDITIONS IN PERFORMING THE WORK UNDER THE

WHERE EXISTING POWER, LIGHTING OR CONTROL CIRCUITRY IS BROKEN BY REMOVAL OF EXISTING DEVICES, EQUIPMENT OR FIXTURES, OR BY DEMOLITION WORK, CUTTING OR REMOVAL OF EXISTING BUILDING CONSTRUCTION, AND WHERE THE EXISTING CIRCUITRY IS REQUIRED BY REMAINING DEVICES OR EQUIPMENT TO STAY IN SERVICE, THEN THE CIRCUITRY SHALL BE COMPLETED AS REQUIRED BY JOB CONDITIONS.

16010.05 - MATERIAL AND MANUFACTURE ALL MATERIAL AND EQUIPMENT SHALL BE NEW EXCEPT AS STATED OTHERWISE; SHALL BE OF THE BEST QUALITY AND DESIGN; SHALL BE FREE FROM DEFECTS AND IMPERFECTIONS AND SHALL HAVE MARKINGS OR A NAMEPLATE IDENTIFYING THE MANUFACTURER AND PROVIDING SUFFICIENT REFERENCE TO ESTABLISH QUALITY, SIZE AND CAPACITY.

ALL PRODUCTS PROPOSED FOR USE, INCLUDING THOSE SPECIFIED BY REQUIRED ATTRIBUTES AND PERFORMANCE, SHALL REQUIRE APPROVAL BY THE ENGINEER BEFORE BEING INCORPORATED INTO THE WORK. WHERE THE PHRASE "OR EQUAL" OR "APPROVED EQUAL" OCCURS IN THE CONTRACT DOCUMENTS, DO NOT ASSUME THAT MATERIALS, EQUIPMENT OR METHODS WILL BE APPROVED AS EQUAL UNLESS THE ITEM HAS BEEN SPECIFICALLY APPROVED FOR THIS WORK BY THE ENGINEER/ARCHITECT.

16010.07 - SAFETY REGULATIONS ALL DIVISION 16 WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE AND GOVERNING SAFETY REGULATIONS OF THE OCCUPATIONAL

16010.08 - CODES, ORDINANCES, REGULATIONS AND U.L. APPROVAL

ALL DIVISION 16 WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS INCLUDING THE CURRENT RULES AND REGULATIONS OF THE NATIONAL ELECTRICAL CODE, THE NATIONAL FIRE PROTECTION ASSOCIATION, OSHA, AND ALL STATE AND LOCAL LAWS, CODES AND ORDINANCES. FIXTURES, APPLIANCES, EQUIPMENT AND MATERIALS WHICH ARE SUBJECT TO UNDERWRITERS LABORATORY TESTS SHALL BEAR SUCH APPROVAL.

16010.09 – OPENINGS IN FIRE RATED ASSEMBLIES

WHERE OPENINGS ARE MADE, OR LEFT DUE TO CONSTRUCTION THROUGH FIRE RATED ASSEMBLIES FOR CONDUIT OR NIPPLES, FOR SLEEVES CONTAINING CABLE OR WIRE, AND OPEN CONDUITS THROUGH FIRE RATED ASSEMBLIES, THE AREA AROUND THE OPENINGS, SLEEVES AND CONDUITS SHALL BE FILLED WITH CHASE TECHNOLOGY CORP. #CTCPF-855 OR DOW CORNING #3-6548 RTV SILICONE OR APPROVED EQUAL FIRE-RESISTANT FOAM SEALANT AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

16010.10 - ROOF PENETRATIONS

ALL OPENINGS IN THE ROOF FOR ELECTRICAL CONDUITS SHALL BE MADE WEATHER AND WATER TIGHT USING "STONEMAN" MULTI-FLASH OR VERSA-FLASH SEAMLESS FLASHING ASSEMBLY FOR CONDUIT THROUGH 2" DIAMETER. CONDUIT SIZES OVER 2" DIAMETER SHALL HAVE PITCH POCKETS FILLED WITH PITCH AND GALVANIZED DRIP SHIELD INSTALLED AROUND CONDUITS. THE DRIP SHIELD SHALL COMPLETELY COVER THE PITCH POCKET.

16010.11 – EXCAVATION AND BACK FILLING

PERFORM ALL EXCAVATING AND BACK FILLING FOR THE CONSTRUCTION AND INSTALLATION OF THE WORK INCLUDED UNDER THIS DIVISION. LINES SHALI BE USED TO LAYOUT THE TRENCHES FOR ALL UNDERGROUND WORK. TRENCHES CLOSE TO WALLS, FOUNDATIONS, AND COLUMNS SHALL NOT BE EXCAVATED WITHOUT PRIOR CONSULTATION WITH THE ENGINEER/ARCHITECT. ALL EXCAVATIONS SHALL BE PROPERLY PROTECTED BY THE NECESSARY BRACING AND TIMBERS TO PREVENT ANY CAVE-INS OR INJURY TO ADJACENT

CUT AND REPLACE ALL EXISTING WALKS, ROADS, STREET PAVEMENT, CURBS, STEPS, RETAINING WALLS AND MISCELLANEOUS WORK REQUIRED FOR INSTALLATION OR WORK UNDER THIS DIVISION. THE BACK FILLING OF TRENCHES SHALL BE CARRIED OUT AS RAPIDLY AS THE FINISHED WORK IS APPROVED AND WILL PERMIT. THE TRENCH SHALL BE BACK FILLED IN LAYERS NOT TO EXCEED 6" WITH GOOD SELECTED DRY EARTH THOROUGHLY TAMPED WITH A PNEUMATIC TAMPER. AFTER BACK FILLING, ALL SURPLUS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.

16010 12 - SHOP DRAWINGS AND SAMPLES

SUBMIT FOR APPROVAL A PDF SET OF MANUFACTURER'S SHOP DRAWINGS OF ALL MAJOR ITEMS OF EQUIPMENT AND ALL ITEMS REQUIRING COORDINATION BETWEEN CONTRACTORS. ACCEPTANCE OF THE WORK SHALL BE SUBJECT TO THE ENGINEER'S/ARCHITECT'S APPROVAL OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES. SHOP DRAWINGS SHALL INCLUDE MANUFACTURERS' DETAIL DRAWINGS OF EQUIPMENT AND MATERIALS AND CONTRACTOR'S SHOP DETAILS FOR INSTALLATION. DESCRIPTIVE LITERATURE SHALL INCLUDE CATALOG DATA COVERING DESIGN. SIZE AND CAPACITY OF MATERIAL AND EQUIPMENT. SUBMITTALS SHALL INCLUDE THE MANUFACTURER'S MODEL NUMBER, CAPACITY, PERFORMANCE DATA, ELECTRICAL CHARACTERISTICS, ETC., ALL CLEARLY SHOWN AND MARKED FOR THE SPECIFIC ITEM OF EQUIPMENT BEING FURNISHED ON THIS PROJECT.

THE CONTRACTOR SHALL KEEP DAY-TO-DAY RECORD OF ALL CHANGES OR VARIATIONS MADE FROM THE CONTRACT DOCUMENTS AND AT THE END OF

THE PROJECT SHALL PROVIDE THE OWNER/ARCHITECT/ENGINEER WITH REPRODUCIBLE SETS AS REQUESTED. 16010 14 – HIRING OF MECHANICAL FOUIPMENT

FURNISH AND INSTALL ALL POWER WIRING, AND ALL CONTROL AND INTERLOCK WIRING OF ALL UNITS, PUMPS, FANS, WATER HEATERS, ETC. CONNECT PER MANUFACTURER'S WIRING DIAGRAMS. FURNISH AND INSTALL ALL NECESSARY DISCONNECT SWITCHES REQUIRED. AFTER INSTALLATION OF THE CONTROL INTERLOCK WIRING, THE CONTRACTOR SHALL VERIFY THAT EACH MOTOR LOAD HAS THE CORRECT PHASE ROTATION. THE CONTRACTOR SHALL VERIFY THE ACTUAL WIRE SIZING AMPS FOR MECHANICAL EQUIPMENT FROM THE EQUIPMENT NAMEPLATE. ELECTRICAL INSTALLATION SHALL BE BASED ON ACTUAL REQUIRED AMPERAGES. WHICH MAY VARY SOMEWHAT FROM THE WIRE AND EQUIPMENT SIZES SHOWN ON THE DRAWINGS. PROPERLY SIZED ELECTRICAL WIRING AND EQUIPMENT SHALL BE FURNISHED WITHOUT EXTRA COST TO THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL CHANGES TO BE MADE IN THE ELECTRICAL INSTALLATION DUE TO EQUIPMENT VARIANCES THAT IMPACT FEEDERS. PANELS. FUSE AND BREAKER SIZES SO THEY CAN BE CHECKED PRIOR TO INSTALLATION.

16010.15 – WIRING OF THERMOSTATS AND TEMPERATURE CONTROLS FURNISH AND INSTALL ALL POWER WIRING, AND ALL CONTROL AND INTERLOCK WIRING OF ALL THERMOSTATS AND TEMPERATURE CONTROL DEVICES INCLUDING NIGHTSTATS, TIME SWITCHES, OVERRIDE TIMERS, ETC. SEE MECHANICAL DRAWINGS FOR LOCATIONS AND TEMPERATURE CONTROL

16010.16 - TELEPHONE SYSTEM PROVISIONS

ELECTRICAL CONTRACTOR TO FIELD VERIFY WITH LOCAL SERVICE PROVIDER FOR THE EXACT REQUIREMENTS TO BRING SERVICE TO THIS PROJECT. PROVIDE AND INSTALL FLUSH MOUNTED TELEPHONE OUTLET BOXES WITH 1" CONDUIT STUB UP CONCEALED TO ACCESSIBLE CEILING SPACE AT

16010 17 - DATA SYSTEM PROVISIONS

PROVIDE AND INSTALL FLUSH MOUNTED DATA OUTLET BOXES WITH 1" CONDUIT STUB UP CONCEALED TO ACCESSIBLE CEILING SPACE AT LOCATIONS AS SHOWN ON THE DRAWINGS.

16010.18 - ADJUSTING, ALIGNING AND TESTING

ALL ELECTRICAL EQUIPMENT ON THIS PROJECT FURNISHED UNDER THIS DIVISION AND ALL ELECTRICAL EQUIPMENT FURNISHED BY OTHERS SHALL BE ADJUSTED, ALIGNED AND TESTED FOR PROPER OPERATION BY THE ELECTRICAL CONTRACTOR. COMPLETE WIRING CIRCUITS SHALL BE FREE FROM SHORT CIRCUITS. ALL MOTORS SHALL BE VERIFIED FOR PROPER PHASE ROTATION. THE CONTRACTOR SHALL PROVIDE TEST DATA READINGS AS REQUESTED OR AS NOTED. THE CONTRACTOR SHALL HAVE THE FOLLOWING READILY ACCESSIBLE AT ALL TIMES DURING THIS PROJECT: A TRUE RMS READING VOLTMETER, A TRUE RMS READING AMMETER, AND A MEGGER INSULATION RESISTANCE METER

16010.19 - OPERATION AND MAINTENANCE INSTRUCTIONS

SUBMIT TO THE ARCHITECT THREE COPIES EACH OF MATERIAL FOR MAINTENANCE AND OPERATION INSTRUCTION MANUALS, APPROPRIATELY BOUND INTO MANUAL FORM INCLUDING APPROVED COPIES OF THE FOLLOWING, REVISED IF NECESSARY TO SHOW SYSTEM AND EQUIPMENT AS ACTUALLY INSTALLED: MANUFACTURERS' CATALOG SHEETS, WIRING DIAGRAMS, MAINTENANCE INSTRUCTIONS, OPERATING INSTRUCTIONS, PARTS LIST. CONTRACTOR SHALL ALSO PROVIDE ADEQUATE VERBAL INSTRUCTIONS OF SYSTEM OPERATION TO OWNER'S REPRESENTATIVE AT THE TERMINATION OF

16010.20 - STARTUP OF SYSTEMS

PRIOR TO STARTUP OF THE ELECTRICAL SYSTEMS, THE CONTRACTOR SHALL CHECK ALL COMPONENTS AND DEVICES, LUBRICATE ITEMS ACCORDINGLY, AND TIGHTEN ALL SCREWED AND BOLTED CONNECTIONS. ADJUST TAPS ON EACH TRANSFORMER FOR RATED SECONDARY VOLTAGE. CHECK SERVICE ENTRANCE VOLTAGE, GROUNDING CONDITIONS, GROUNDING RESISTANCE AND PROPER PHASING. BALANCE SINGLE PHASE LOADS AT EACH PANELBOARD, REDISTRIBUTING BRANCH CIRCUIT CONNECTIONS UNTIL BALANCE IS ACHIEVED. AFTER ALL SYSTEMS HAVE BEEN INSPECTED AND ADJUSTED, CONFIRM ALL OPERATING FEATURES REQUIRED BY THE DRAWINGS AND SPECIFICATIONS AND MAKE FINAL ADJUSTMENTS AS NECESSARY

16010.21 – GUARANTEE

GUARANTEE AGAINST WORKMANSHIP AND MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL PAYMENT. GUARANTEE SHALL INCLUDE MATERIAL TO BE REPLACED AND ALL LABOR REQUIRED.

16014 - ELECTRICAL IDENTIFICATION

16014.01 - DESCRIPTION OF WORK PROVIDE AND INSTALL REQUIRED IDENTIFICATION FOR THE SYSTEMS AND EQUIPMENT SHOWN ON THE DRAWINGS AND/OR SPECIFIED.

UNDERGROUND PLASTIC LINE MARKER: MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS-PRINTED PLASTIC TAPE, FOR DIRECT BURIAL SERVICE; MINIMUM 6" WIDE X 4 MILS THICK. PRINTING TO INDICATE TYPE OF SERVICE CABLE; WITH LARGE (MINIMUM 2-1/2") HIGH

CABLE/CONDUCTOR IDENTIFICATION BANDS: MANUFACTURER'S STANDARD VINYL SELF-ADHESIVE SELF LAMINATING CABLE/CONDUCTOR MARKERS WRAP AROUND TYPE; PRE-NUMBERED PLASTIC COATED, OR WRITE-ON TYPE WITH CLEAR PLASTIC SELF-ADHESIVE COVER FLAP, LETTERING TO

SELF-ADHESIVE PLASTIC SIGNS: MANUFACTURER'S STANDARD, SELF ADHESIVE, PRE-PRINTED, FLEXIBLE VINYL SIGNS FOR OPERATIONAL

DANGER SIGNS: MANUFACTURER'S STANDARD "DANGER" SIGNS, BAKED ENAMEL FINISH ON 20 GAUGE STEEL; STANDARD RED, BLACK AND WHITE

INSTALLATION OF RACEWAY SYSTEMS FOR ALL WORK IN DIVISION 16 INCLUDING REQUIRED FITTINGS AND SUPPORTS. ALL CONDUCTORS SHALL BE

SHOW CIRCUIT IDENTIFICATION. SIMILAR TO PANDUIT "INSTACODE" OR ACCEPTED EQUIVALENT BY T&B OR TYTON.

INSTALLED IN METALLIC CONDUIT UNLESS SPECIFIED.

ALL CONDUIT SHALL BE ELECTRICAL METALLIC TUBING (EMT), EXCEPT CONDUIT LARGER THAN 4" DIAMETER, CONDUIT OUTDOORS OR IN WET OR DAMP LOCATIONS, OR IN NEC CLASSIFIED HAZARDOUS LOCATIONS, CONDUIT IN EARTH OR BELOW GRADE, AND EXCEPT AS OTHERWISE NOTED ON THE DRAWINGS OR SPECIFIED OTHERWISE.

ELECTRICAL METALLIC TUBING TO BE THREADLESS, STEEL TYPE CONFORMING TO ANSI STANDARD C80.3, NEC 348, AND UL 797, GALVANIZED INSIDE

ALL EMT FITTINGS TO BE COMPRESSION TYPE UNLESS OTHERWISE NOTED.

SHORT SECTIONS OF FLEXIBLE CONDUIT (GREENFIELD) SHALL BE USED FROM JUNCTION OR OUTLET BOXES TO LIGHTING FIXTURES AS PERMITTED

ALL UNDERGROUND CONDUIT SHALL BE RIGID. ENCASE EACH UNDERGROUND CONDUIT IN CONCRETE AS INDICATED ON THE DRAWINGS.

BY THE NATIONAL ELECTRICAL CODE. CONNECTIONS FROM OUTLET BOXES ABOVE CEILINGS TO FLUORESCENT FIXTURES RECESSED IN CEILING SHALL BE MADE WITH FLEXIBLE METALLIC STEEL CONDUIT NOT TO EXCEED 6 FEET IN LENGTH. FINAL CONNECTIONS TO MOTORS, TRANSFORMERS AND TO ANY PIECE OF EQUIPMENT THAT WILL TRANSMIT MOTION, NOISE OR VIBRATION, SHALL BE FLEXIBLE METAL CONDUIT. FLEXIBLE CONDUIT SHALL NOT BE INSTALLED OUTDOORS OR IN DAMP LOCATIONS. ALL FLEXIBLE CONDUIT IN DENTAL SPACE SHALL BE HCF TYPE.

LIQUID TIGHT FLEXIBLE STEEL CONDUIT SHALL BE USED WHEN MAKING CONNECTIONS IN THE FOLLOWING CONDITIONS: EXPOSED TO LIQUIDS, EXPOSED TO VAPORS, EXPOSED TO SUNLIGHT

16110.03 - INSTALLATION CONDUITS SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING LINES AND SHALL BE RUN AGAINST THE STRUCTURE IN A NEAT WORKMANLIKE MANNER.

CONDUIT SHALL BE INSTALLED CONCEALED ABOVE SUSPENDED CEILINGS OR CONCEALED IN WALLS OR FLOORS WHEREVER POSSIBLE. CONDUIT SHALL BE INSTALLED TO CLEAR ALL OPENINGS, DEPRESSIONS, PIPES, DUCTS, REINFORCING STEEL, ETC. ALL CONDUIT SHALL BE RUN OVERHEAD. CONDUIT SHALL BE RUN CONTINUOUS BETWEEN CONNECTIONS TO OUTLET BOXES AND CABINETS WITH MINIMUM POSSIBLE NUMBER OF BENDS. RADIUS OF BENDS SHALL BE AS LONG AS POSSIBLE AND NEVER SHORTER THAN THE CORRESPONDING TRADE ELBOW. LONG RADIUS ELBOWS SHALL BE USED WHERE NECESSARY. CONDUITS SHALL BE SECURELY FASTENED IN PLACE WITH APPROVED STRAPS, HANGERS AND STEEL SUPPORTS AS REQUIRED. SINGLE CONDUITS FOR FEEDERS SHALL BE HUNG WITH MALLEABLE SPLIT RING HANGERS WITH ROD AND TURNBUCKLE SUSPENSION FROM INSERTS SPACED NOT OVER 10 FEET APART FROM CONSTRUCTION ABOVE. GROUPS OF HORIZONTAL FEEDER CONDUITS SHALL BE CLAMPED TO UNISTRUT STEEL CHANNELS AND SUSPENDED FROM INSERTS NOT SPACED OVER 10 FEET APART IN CONSTRUCTION ABOVE. HORIZONTAL FEEDER CONDUITS SHALL BE CLAMPED TO STRUCTURAL STEEL MEMBERS ATTACHED TO THE STRUCTURE. CABLE CLAMPS SHALL BE INSTALLED FOR SUPPORT OF VERTICAL FEEDERS WHERE REQUIRED. CONDUIT SUPPORTS SHALL BE ADDED WITHIN 12" AT ONE END OF ALL BENDS. CONDUIT SHALL NOT BE SUSPENDED FROM SUSPENDED CEILING COMPONENTS.

CONDUIT ENDS SHALL BE REAMED BEFORE INSTALLATION AND ALL CONDUIT SHALL BE THOROUGHLY CLEANED BEFORE INSTALLATION AND KEPT CLEAN AFTER INSTALLATION. PLUG CONDUIT AND BOXES AS REQUIRED DURING CONSTRUCTION TO KEEP CONDUIT CLEAN. CONDUIT SHALL BE OF AMPLE SIZE TO PULL CONDUCTORS AND NOT SMALLER THAN THE CODE REQUIRED. MINIMUM SIZE CONDUIT SHALL BE 1/2" FOR FAULT.

WHERE BUILDING EXPANSION JOINTS ARE SHOWN ON THE DRAWINGS PROVIDE PROPER CONDUIT EXPANSION FITTING.

THE NECESSARY JUNCTION BOXES, COUPLINGS, SUPPORTS, ADAPTERS, ETC. TO FORM A COMPLETE ASSEMBLY.

CONDUIT SEALS SHALL BE INSTALLED ON ALL CONDUITS PASSING FROM NON-COOLED TO COOLED SPACES AND IN ALL CONDUIT PENETRATIONS OF

INSTALL A PULL WIRE IN EACH EMPTY CONDUIT WHICH IS LEFT BY THE CONTRACTOR.

ALL CONDUITS AND/OR SURFACE RACEWAYS SHALL BE PAINTED WHERE INSTALLED EXPOSED IN FINISHED SPACES. PAINTING OF SURFACE RACEWAYS SHALL BE AS DIRECTED BY THE ENGINEER/ARCHITECT.

16120 - CONDUCTORS (LOW VOLTAGE, 600 VOLTS)

FURNISH AND INSTALL 600 VOLT CONDUCTORS AND ASSOCIATED SPLICES, CONNECTORS AND TERMINATIONS FOR LIGHTING, POWER AND AUXILIARY SYSTEMS AS SHOWN ON THE CONTRACT DOCUMENTS.

98% CONDUCTIVITY COPPER. NEC TYPE THHN/THWN (90°C DRY / 75°C WET) WITH UL LABEL. ALL CONDUCTORS TO BE IN CONDUIT.

SINGLE CONDUCTOR, STRANDED (ALL SIZES), SOFT ANNEALED COPPER CONDUCTORS WITH 600 VOLT THERMOPLASTIC INSULATION AND NYLON

WIRE SMALLER THAN #12 GAUGE SHALL NOT BE USED UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS OR IN THESE SPECIFICATIONS.

WIRE INSULATION SHALL BE COLOR COATED AS FOLLOWS OR PER LOCAL ORDINANCES: 120/240V – A-BLACK, B-RED, C-ORANGE, NEUTRAL-WHITE, G-GREEN

BLACK INSULATION IS ACCEPTABLE FOR #8 WIRE AND LARGER. CONDUCTOR ENDS SHALL BE WRAPPED WITH COLORED TAPE AS INDICATED ABOVE IF NO WIRE SIZE IS INDICATED ON THE DRAWINGS FOR A BRANCH CIRCUIT, PROVIDE #12 AWG WIRE AND A 20A CIRCUIT BREAKER. CONTROL WIRING SHALL HAVE GOOD INSULATION AND BE OF THE PROPER TYPE. SIZE AND NUMBER REQUIRED TO ACCOMPLISH SPECIFIED FUNCTION.

16120.03 - INSTALLATION ALL WIRING SHALL BE INSTALLED IN APPROVED RACEWAYS OR ENCLOSURES. WIRE IN CONDUIT SHALL RUN CONTINUOUS WITHOUT SPLICES OR TAPS. ALL SPLICES OR TAPS SHALL OCCUR IN APPROVED BOXES AND ENCLOSURES AND SHALL BE KEPT TO A MINIMUM, AND SHALL BE MADE WITH APPROVED SOLDERLESS CONNECTIONS. ALL SPLICES. TAPS AND JOINTS SHALL BE INSULATED PER THE NATIONAL ELECTRICAL CODE. ALL MATERIALS USED TO TERMINATE, SPLICE OR TAP CONDUCTORS SHALL BE DESIGNED FOR, PROPER SIZE FOR, AND UL LISTED FOR THE SPECIFIC APPLICATION AND CONDUCTORS INVOLVED, AND SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, USING THE MANUFACTURER'S RECOMMENDED TOOLS.

WHERE WIRE IS TO BE INSTALLED, BUT THE CONNECTION IS INDICATED "FUTURE" OR "BY OTHERS", THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 3 FLOOR WITH THE TOP A MAXIMUM OF 7".4" AFF. WHERE PANELS OF DIFFERENT HEIGHTS ARE MOUNTED ADJACENT, INSTALL THE TOP PANEL TRIM AT FEET OF "PIGTAIL" AT THE BOX. TAPE ALL CONDUCTOR ENDS AND COVER THE BOX.

VOLTAGE DROP IN BRANCH CIRCUITS SHALL NOT EXCEED 2%. ALL BRANCH CIRCUITS SHALL HAVE EQUIPMENT GROUNDING CONDUCTORS AND SHALL BE SIZED PER NEC TABLE 250-95.

16130 - OUTLET BOXES, JUNCTION BOXES AND WIRING BODIES/GUTTERS

16130 01 - DESCRIPTION OF WORK FURNISH AND INSTALL OUTLET BOXES, FLOOR BOXES, PULL BOXES, JUNCTION BOXES AND WIRING GUTTERS AS SHOWN ON THE CONTRACT DOCUMENTS OR AS REQUIRED.

16130.02 - OUTLET/JUNCTION BOXES PROVIDE WIRING DEVICES, FIXTURES AND SPECIAL SYSTEM DEVICES WITH OUTLET BOX. USE GALVANIZED STEEL BOXES CONFORMING TO UL

STANDARD 514A FOR CONCEALED AND EXPOSED DRY LOCATIONS. ALL BOXES SHALL HAVE MATCHING COVER PLATES. USE 1/16" THICK STEEL BOXES AND COVERS OF FORM AND DIMENSION ADAPTED TO ITS SPECIFIC USE AND LOCATION, KIND OF FIXTURE OR DEVICE TO BE USED AND NUMBER, SIZE AND ARRANGEMENT OF CONNECTION CONDUITS AND NUMBER OF WIRES IN OUTLET, ALL IN ACCORDANCE WITH THE NEC. ALL BOXES SHALL BE SET IN WALLS, COLUMNS, FLOORS, OR CEILINGS SO AS TO BE FLUSH WITH THE FINISHED SURFACE AND BE ACCURATELY SET AND RIGIDLY SECURED IN POSITION. PROVIDE PLASTER RINGS, EXTENSION RINGS AND MASONRY RINGS AS REQUIRED FOR FLUSH MOUNTING.

MANUFACTURERS: NATIONAL ELECTRICAL, APPLETON, STEEL CITY OR RACO

16130.03 - LARGE PULL BOXES FURNISH PULL, TAP AND CABLE SUPPORT BOXES REQUIRED BY THE NEC FOR EXCESSIVE NUMBER OF 90 DEGREE CONDUIT BENDS, CONDUIT TAPS AND CABLE SUPPORTS.

BOX CONSTRUCTION PER NEC AND CONFORMING TO UL STANDARD #50. BOX TO BE MANUFACTURED WITH MINIMUM 12 GAUGE GALVANIZED STEEL. PROVIDE SEPARATE PULL BOX FOR EACH FEEDER.

BOXES LOCATED IN DAMP OR WET LOCATIONS SHALL BE WELDED CONSTRUCTION AND FINISHED WHITE INSIDE AND GRAY OUTSIDE WITH WATERPROOF PAINT. PROVIDE GASKETED DOOR AND CORNERS. PROVIDE RAIN DRIP SHIELDS. BOXES SHALL CARRY NEMA 3R (WEATHERPROOF) OR NEMA 4 (WATERTIGHT) LABELS AS SPECIFIED.

ACCEPTABLE MANUFACTURERS: HOFFMAN, KEYSTONE, BURNS

CONDUIT BODIES SHALL BE INSTALLED TO PROVIDE EASE OF CONDUCTORS AND TO PROVIDE NEAT APPEARANCE TO CONDUIT INSTALLATION, AND AS FURNISH AND INSTALL ALL DEVICE COVER PLATES, 0.1" THICK SMOOTH PLASTIC COVER PLATES. VERIFY COLOR AND MATERIAL WITH SHOWN ON THE DRAWINGS. CONDUIT BODIES SHALL BE CONSTRUCTED OF MALLEABLE IRON OR COPPER FREE ALUMINUM CASTINGS. BODIES SHALL BE FINISHED WITH STANDARD DURABLE EXTERIOR COATINGS OF MANUFACTURER SPECIFIED. PROVIDE ROLLERS IN TYPE "C" AND TYPE "LB" BODIES 1-1/4" SIZE AND LARGER. PROVIDE GASKETED PLATED STEEL OR MALLEABLE IRON COVERS.

ACCEPTABLE MANUFACTURERS: CROUSE-HINDS, KILLARK, APPLETON

16130.05 - GUTTERS (WIREWAYS)

8"X8" AND SMALLER - USE STANDARD ASSEMBLE CONSISTING OF CODE GAGE GALVANIZED OR PAINTED STEEL AND

ACCEPTABLE MANUFACTURERS - SQUARE-D, GENERAL ELECTRIC, WALKER ELECTRIC, B&C STAMPING CO.

WHERE INDICATED ON THE DRAWINGS, WIRING SHALL BE RUN IN EXPOSED METAL RACEWAYS, COMPLETE WITH OUTLET BOXES AND FITTINGS. ALL

CIRCUITS RUN IN SURFACE METAL RACEWAYS SHALL HAVE GROUND CONDUCTOR WITH GREEN INSULATION SIZED PER NEC, BUT NOT SMALLER THAN #12 AWG SCREW CONNECTED TO EACH OUTLET BOX.

ACCEPTABLE MANUFACTURERS – WIREMOLD, PANDUIT

16134.01 - DESCRIPTION OF WORK PROVIDE AND INSTALL LIGHTING AND POWER PANEL BOARDS, RATED FOR 600 VOLTS OR LESS, AS SPECIFIED HEREIN AND AS SHOWN OR INDICATED ON THE DRAWINGS AND SCHEDULES.

PROVIDE SHOP DRAWINGS FOR EACH PANELBOARD. INCLUDE INDIVIDUAL DIAGRAM OF EACH PANELBOARD SHOWING ALL SPECIFIED REQUIREMENTS. IN ADDITION, SUBMITTALS SHALL INDICATE OVERALL PANELBOARD DIMENSIONS, INTERIOR DIMENSIONS, BUS CONFIGURATION, WIRE GUTTER DIMENSIONS, SHORT CIRCUIT RATING PANELBOARD AND OVERCURRENT DEVICES.

CONSTRUCT PANELBOARDS IN ACCORDANCE WITH THE LATEST ADDITION OF THE FOLLOWING STANDARDS: UL STANDARDS NO. 50, 67, 48, 484, AND 443

NEMA PUBLICATION PB-1 PANELBOARD ASSEMBLY SHALL BE UL LABELED, AND LABELED AS SERVICE ENTRANCE EQUIPMENT WHERE USED FOR THAT PURPOSE.

16134 04 - BASIC PANEL BOARD CONSTRUCTION PANELBOARDS TO BE SAME MANUFACTURER AS OTHER DISTRIBUTION EQUIPMENT

PANELBOARDS, BUSSING AND OVERCURRENT DEVICE SHALL HAVE INTEGRATED EQUIPMENT FAULT RATING EQUAL TO OR GREATER THAN THE AVAILABLE FAULT CURRENT

BUSSING SHALL BE 98% CONDUCTIVITY COPPER SIZED TO NEC AND NEMA STANDARDS.

NEUTRAL BUSSES SHALL BE COPPER AND SIZED FOR 100% ON THE SAME BASIS AS PHASE BUSSING AS DESCRIBED AND INSULATED FROM THE

PROVIDE 100% CAPACITY CONTINUOUS COPPER GROUND BUS IN EACH PANEL CABINET. GROUND BUSSES SHALL BE BOLTED TO THE CABINET UNLESS GROUNDING PAD FOR CONNECTION OF CIRCUIT GROUND WIRES.

FURNISH PANELBOARDS WITH VOLTAGE, CURRENT, SHORT CIRCUIT RATING, SIZE AND MOUNTING AS INDICATED ON THE DRAWINGS AND SCHEDULES. IF THE DRAWINGS DO NOT STATE THE INTERRUPT RATING IT SHALL BE 100,000AIC.

16134.05 - POWER DISTRIBUTION PANELBOARDS (1200A AND SMALLER)

POWER DISTRIBUTION PANELS TO BE SQUARE-D TYPE I-LINE OR APPROVED EQUAL. CIRCUIT BREAKERS SHALL BE BOLT-ON, THERMAL-MAGNETIC TYPE, QUICK-MAKE, QUICK-BREAK, ENCLOSURE COMPENSATED, OF SINGLE CONSTRUCTION, TRIP FREE ON FAULTS, THERMAL-INVERSE TIME DELAY ELEMENT AND MAGNETIC INSTANTANEOUS TRIP COIL IN EACH UNGROUNDED PHASE CONDUCTOR, OR APPROVED (4) FOUR FUNCTION SOLID STATE TRIP UNIT. THE (4) FOUR FUNCTION SOLID STATE TRIP UNIT SHALL INCLUDE LONG TIME DELAY, SHORT TIME DELAY, INSTANTANEOUS AND GROUND

AT A MINIMUM GROUND FAULT PROTECTION OF EQUIPMENT SHALL BE PROVIDED FOR SOLIDLY GROUNDED WYE ELECTRICAL SERVICES FOR EACH SERVICE DISCONNECT RATED FOR 1000 AMPERES OR MORE PER NEC 230.

PANEL CABINETS SHALL BE CODE GAUGE GALVANIZED STEEL BOXES WITH TURNED EDGES, REMOVABLE BARRIERS, WIRE GUTTERS ON ALL SIDES FREEZER AND COOLER WALLS. SEALS SHALL CONSIST OF PLIABLE COMPOUND RATED FOR -20 DEGREES F. TO 100 DEGR

LIGHTING AND APPLIANCE PANELBOARDS SHALL BE SQUARE-D TYPE NQOD OR NEHB OR APPROVED EQUAL. PANELBOARDS SHALL BE DESIGNED AS SHOWN ON THE DRAWINGS. NUMBER AND SIZE OF CIRCUIT BREAKERS IN EACH PANELBOARD SHALL BE AS SCHEDULED ON THE DRAWINGS. BREAKERS SHALL BE THERMAL MAGNETIC TYPE, QUICK MAKE, QUICK BREAK, ENCLOSURE COMPENSATED, OF SINGLE CONSTRUCTION. TWO OR

CABINETS SHALL BE CONSTRUCTED OF ONE PIECE CODE GAUGE GALVANIZED STEEL. THE MOUNTING STUDS AND KNOCKOUTS FOR CONDUIT CONNECTIONS AS REQUIRED. FRONTS SHALL BE ONE PIECE OF CODE GAUGE FURNITURE STEEL WITH ADJUSTABLE FASTENERS AND RECESSED DOORS FITTED WITH CONCEALED HINGES. FLUSH CATCH AND LOCK, CABINETS SHALL BE SURFACE OR FLUSH MOUNTED AS INDICATED ON THE DRAWINGS. ALL FRONTS AND ALL SURFACE MOUNTED CABINETS SHALL HAVE RUSTPROOF PRIME COAT AND 2 FINISHED COATS OF ENAMEL OR

ALL BRANCH CIRCUITS TO PANELBOARDS SHALL BE CONNECTED IN A MANNER SO THAT LOADS ARE BALANCED OVER EACH PHASE AS EQUALLY AS POSSIBLE. THE BACK DOOR SHALL BE FITTED WITH A GLASS OR PLASTIC COVERED TYPEWRITTEN SCHEDULE IDENTIFYING ALL BRANCH CIRCUITS.

BREAKERS USED AS SWITCHES FOR 120 OR 277 VOLT CIRCUITS SHALL BE APPROVED FOR THE PURPOSE AND MARKED "SWD." BREAKERS USED FOR PROTECTION OF HVAC EQUIPMENT SHALL BE HACR TYPE.

16134 07 - IDENTIFICATION PERMANENTLY ATTACH NAMEPLATES AND CIRCUIT NUMBERS TO EACH PANEL

PROVIDE EACH PANELBOARD WITH NAMEPLATE SHOWING PANEL DESIGNATION, VOLTAGE RATING AND PHASE.

THREE POLE BREAKERS, WHERE CALLED FOR, SHALL BE SINGLE UNIT COMMON TRIP. BREAKERS SHALL BE BOLT-ON TYPE.

LABEL SHALL BE ENGRAVED LAMINATED-PLASTIC NAMEPLATE. NAMEPLATES SHALL BE BLACK WITH 1/4" HIGH WHITE LETTERS UNLESS OTHERWISE

16134.08 - ACCEPTABLE MANUFACTURERS

CUTI FR-HAMMEI GENERAL ELECTRIC

BOLTS AND INSERTS.

MOUNT PANELBOARDS SECURELY TO BUILDING STRUCTURE WITH 3/8" MINIMUM DIAMETER GALVANIZED BOLTS AND INSERTS NUMBERED AS REQUIRED FOR THE SIZE OF THE PANEL BUT NOT LESS THAN 4 MOUNT PANEL BOARDS WITH CENTERLINE 4'-6" APPROXIMATELY ABOVE FINISHED

THE SAME HEIGHT ABOVE THE FLOOR. CLOSE ALL UNUSED OPENINGS. MOUNT FEEDER PANELBOARDS TALLER THAN 6'-6" ON 4" HIGH 2500# CONCRETE PAD AND BOLT TO THE WALL AND THE PAD WITH 1/2" DIAMETER

16140 - SWITCHES AND RECEPTACLES

16140 01 - DESCRIPTION OF WORK WIRING DEVICES, PLATES AND INSTALLATION.

16140 02 - DEVICES FURNISH AND INSTALL DEVICES AND ASSOCIATED DEVICE PLATES AS SHOWN ON THE DRAWINGS. ALL OUTLETS AND SWITCHES SHALL BE OF THE SAME MANUFACTURER. COLORS OF SWITCHES AND RECEPTACLES SHALL BE AS REQUESTED BY THE ARCHITECT.

STANDARD RECEPTACLES, UNLESS OTHERWISE NOTED, SHALL BE 3 WIRE GROUNDED TYPE, NEMA CONFIGURATION 5-20R, DUPLEX RECEPTACLE RATED AT 20 AMPS AT 125VAC. RECEPTACLES TO COMPLY WITH UL STANDARD 498 AND FEDERAL SPECIFICATION W-C-596.

GROUND-FAULT INTERRUPTER (GFCI) RECEPTACLES: UL STANDARD 943, "GROUND FAULT INTERRUPTERS," FEED-THROUGH TYPE, WITH INTERNAL NEMA 5-20R DUPLEX RECEPTACLE. ARRANGE THE GFCI RECEPTACLE TO PROTECT CONNECTED DOWNSTREAM RECEPTACLES ON THE SAME CIRCUIT FLEXIBLE CONDUIT SHALL BE BONDED AND GROUNDED IN ACCORDANCE WITH THE NEC. AS SHOWN OR AS REQUIRED

PENDENT CORD/CONNECTOR DEVICES: MATCHING, LOCKING TYPE, PLUG AND RECEPTACLE BODY CONNECTOR, NEMA L5-20P AND L5-20R, HEAVY DUTY GRADE UNLESS OTHERWISE SPECIFIED

CORD AND PLUG SETS: MATCH VOLTAGE AND CURRENT RATINGS AND THE NUMBER OF CONDUCTORS TO THE REQUIREMENTS OF THE EQUIPMENT BEING CONNECTED. THE CORD SHALL BE RUBBER INSULATED, STRANDED COPPER CONDUCTORS, WITH TYPE SOW-A JACKET.

SWITCHES: QUIET TYPE A.C. SWITCHES, LISTED AND LABELED TO COMPLYING WITH UL STANDARD 20 "GENERAL USE SNAP SWITCHES", AND FEDERAL SPECIFICATION W-S-896. MANUFACTURERS AS NOTED IN ELECTRICAL DEVICE SCHEDULE.

WHERE INDICATED ON THE PLANS PROVIDE PILOT LIGHT WITH THE ABOVE SNAP SWITCHES. PILOT LIGHT SHALL AND SWITCH TO BE INSTALLED IN A TWO GANG PLATE WITH FLUSH NEON PILOT LIGHT FOR 125 OR 277 VOLT OPERATION AS APPLICABLE, WITH A RED PLASTIC JEWEL LENS.

16140.03 - ACCEPTABLE MANUFACTURERS PASS AND SEYMOUR/LEGRAND

HUBBELL LEVITON **BRYANT EAGLE**

THE ARCHITECT BEFORE INSTALLATION. SWITCH PLATES IN UNFINISHED ROOMS SHALL BE STAMPED STEEL PLATES, CADMIUM PLATED.

DEVICE PLATE SHALL BE MANUFACTURED BY THE DEVICE MANUFACTURER WHERE APPLICABLE.

FURNISH WEATHER PROOF DEVICES WITH INDIVIDUAL GASKETED ALUMINUM OR STAINLESS STEEL COVERS.

16140.05 - MULTI-OUTLET ASSEMBLIES COMPLY WITH STANDARD UL-5 "SURFACE METAL RACEWAYS AND FITTINGS".

COMPONENTS OF ASSEMBLIES: PRODUCTS OF A SINGLE MANUFACTURER DESIGNED TO BE USED TOGETHER TO PROVIDE A COMPLETE MATCHING ASSEMBLY OF RACEWAYS AND RECEPTACLES.

RACEWAY MATERIAL: METAL WITH MANUFACTURER'S STANDARD CORROSION RESISTANT FINISH.

WIRE: NO. 12 AWG MINIMUM

ACCEPTABLE MANUFACTURERS WIREMOLD G-2000 SERIES

EQUAL BY BOSCOT EQUAL BY HUBBELL

INSTALL DEVICES VERTICAL 48" AFF FOR SWITCHES AND 18" AFF FOR RECEPTACLES UNLESS OTHERWISE SHOWN. DEVICES SHALL BE INSTALLED PLUMB AND SECURE ON ALL SIDES. INSTALL RECEPTACLES WITH GROUND SLOT DOWN.

16170 - DISCONNECTS (MOTOR CIRCUIT, AND SEPARATE CIRCUIT BREAKERS)

16170.01 - DESCRIPTION OF WORK FURNISH AND INSTALL SAFETY SWITCHES, DISCONNECTS AND SEPARATELY MOUNTED ENCLOSED CIRCUIT BREAKERS RATED TO 1200 AMPERES, 600 VOLTS AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.

16170.02 - STANDARDS

UL STANDARD 48 NEMA STANDARD KS1-1983 FOR ENCLOSED SWITCHES

NEMA AB1-1986 FOR MOLD CASE CIRCUIT BREAKERS AND SWITCHES

16170.03 - DISCONNECT SWITCHES DISCONNECT SWITCHES SHALL BE HEAVY DUTY, RATED FOR 250 OR 600 VOLTS AS REQUIRED. SWITCHES SHALL BE QUICK-MAKE QUICK-BREAK OPERATION AND HORSEPOWER RATED. THE OPERATING HANDLE SHALL BE INTERLOCKED WITH THE WITCH DOOR TO PREVENT OPENING OF THE DOOR WITH THE SWITCH CLOSED. PROVIDE MECHANICAL OVERRIDE FOR UTHORIZED PERSONNEL TO OPEN THE SWITCH DOOR WITHOUT OPERATING THE SWITCH HANDLE.

SWITCHES SHALL BE FUSIBLE OR NON-FUSIBLE AS SHOWN. FURNISH ONE TIME, DUAL ELEMENT, CLASS K5, REJECTION TYPE FUSES FOR EACH FUSIBLE POSITION, RATING AS SHOWN. FURNISH 3 SPARE FUSES FOR EACH RATING.

FUSIBLE SWITCHES LARGER THAN 600 AMPS SHALL BE SUITABLE FOR CLASS L FUSES. FUSES SERVING PREDOMINANTLY MOTOR OR TRANSFORMER LOADS SHALL BE DUAL ELEMENT, TIME DELAY TYPE. OTHERWISE NON-TIME DELAY FAST ACTING TYPE IS REQUIRED.

FURNISH SOLID NEUTRAL FOR EACH SWITCH BEING INSTALLED IN A CIRCUIT WHICH INCLUDES A NEUTRAL CONDUCTOR. FURNISH A

THE DISCONNECT SWITCH SHALL BE FURNISHED WITH PROVISIONS FOR LOCKING WITH A PADLOCK. ENCLOSURES FOR SWITCHES TO

PROVIDE MECHANICAL LUGS AND POWER DISTRIBUTION CONNECTORS FOR NUMBER, SIZE, AND MATERIAL OF CONDUCTORS AS

INDICATED ON THE DRAWINGS. ACCEPTABLE FUSE MANUFACTURERS

FUSES SHALL BE CURRENT LIMITING WITH 200,000AIC

BUSSMAN LITTELFUSE CHASE SHAWMUT

SQUARE-D

BE NEMA 1, GENERAL PURPOSE INDOOR, OR NEMA 3R OR 4 FOR OUTDOOR LOCATIONS, WATERTIGHT ACCEPTABLE SWITCH MANUFACTURERS

CUTLER-HAMMER / WESTINGHOUSE

FURNISH AND INSTALL SEPARATELY MOUNTED CIRCUIT BREAKERS FOR OVERCURRENT PROTECTION OF FEEDERS AND BRANCH

CIRCUITS WHERE SHOWN ON THE DRAWINGS. CIRCUIT BREAKERS SHALL BE THERMAL-MAGNETIC, MOLDED CASE TYPE, RATED FOR 600 VOLTS. THE INTERRUPT RATING SHALL BE AS SHOWN OR ON THE DRAWINGS. IF NO INTERRUPT RATINGS ARE SHOWN ON THE DRAWINGS THEY SHALL BE RATED FOR 100,000AIC. ENCLOSURES FOR INDIVIDUAL CIRCUIT BREAKERS TO BE NEMA 1, GENERAL PURPOSE INDOOR, OR NEMA 3R OR 4 FOR OUTDOOR

LOCATIONS, WATERTIGHT, ACCEPTABLE CIRCUIT BREAKER MANUFACTURERS

CUTLER HAMMER / WESTINGHOUSE

SQUARF-D

6450 01 - DESCRIPTION OF WORK THIS SECTION INCLUDES GROUNDING OF ELECTRICAL SYSTEMS AND EQUIPMENT AND BASIC REQUIREMENTS FOR GROUNDING FOR

PROTECTION OF LIFE, EQUIPMENT, CIRCUITS, AND SYSTEMS. 16450.02 - STANDARDS NFPA 70. ARTICLE 250 - GROUNDING

IEEE STANDARD 142 (GREEN BOOK)

16450.03 - ELECTRICAL SYSTEM AND EQUIPMENT GROUNDING ALL PRODUCTS SHALL BE UL LISTED AND LABELED.

BOND THE GROUND MAIN SERVICE NEUTRAL, CABINETS, EQUIPMENT, CONDUITS, ETC., PER LATEST EDITION OF THE NEC AND AS SHOWN ON THE DRAWINGS, AND SPECIFIED HEREIN.

GROUND CONDUCTORS SHALL BE 98% CONDUCTIVITY COPPER. OTHER CONDUCTOR REQUIREMENTS SHALL BE THE SAME AS

ALL CONDUIT SYSTEMS, BOXES, ELECTRICAL EQUIPMENT, ENCLOSURES, MOTOR FRAMES, ETC., SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEC LOCAL AUTHORITIES AND AS SPECIFIED

A SEPARATE EQUIPMENT GROUND CONDUCTOR SHALL BE INSTALLED INSIDE OF EACH CONDUIT RUN FOR GROUNDING ALL CIRCUITS ABOVE 48 VOLTS. THE METALLIC CONDUIT SHALL NOT BE USED AS A GROUNDING CONDUCTOR.

GROUND WIRE SIZE THRU #10 SHALL BE STRANDED COPPER, GREEN TYPE THHN 75 DEGREES C INSULATION. GROUND WIRES SIZED #8 AND LARGER SHALL BE STRANDED COPPER, TYPE THHN OR THW WITH GREEN INSULATION OR GREEN TRACER.

DESCRIBED FOR LOW VOLTAGE, 600 VOLT, CONDUCTORS AND SPECIFIED HEREIN.

GROUNDING CONDUCTORS IN CONTACT WITH EARTH SHALL BE SOLID BARE TINNED COPPER.

NO ELECTRICAL SYSTEM NEUTRAL SHALL BE USED AS A EQUIPMENT GROUND.

TYPES ARE SPECIFIED BY CATALOG NUMBER IN THE LUMINAIRE (LIGHTING) SCHEDULE ON THE DRAWINGS

GROUND WIRES SHALL BE RUN CONTINUOUS FROM TERMINATION POINT TO TERMINATION POINT WITHOUT SPLICES. ALL OUTLET BOXES AND JUNCTION BOXES, DISCONNECTS, ETC., SHALL BE GROUNDED. THE GROUND WIRE TERMINAL OF EACH DEVICE SHALL BE CONNECTED TO THE GROUND CONDUCTOR.

ALL METAL ENCLOSURES FOR ELECTRICAL DISTRIBUTION AND CONTROLS, ALL METAL EQUIPMENT SUPPORTS FOR ELECTRICAL CONTROLS AND ALL SIMILAR ITEMS SHALL BE CONNECTED TO THE GROUND SYSTEM.

ALL FLEXIBLE CONDUITS WITH CIRCUITS CONTAINING AN AMPACITY GREATER THAN 20 AMPS SHALL INCLUDE A GROUND WIRE AS WELL AS ANY FLEXIBLE CONDUIT OVER 6 FEET IN LENGTH.

16500 - LUMINAIRES

THIS SECTION SPECIFIES MATERIALS USED FOR LIGHTING LUMINAIRES, THEIR INSTALLATION AND LAMPING. SPECIFIC LUMINAIRE

6500.02 - STANDARDS CMB - CERTIFIED BALLAST MANUFACTURERS ETL - ELECTRICAL TESTING LABORATORY

IES – ILLUMINATING ENGINEERING SOCIETY

ACCESSORIES REQUIRED.

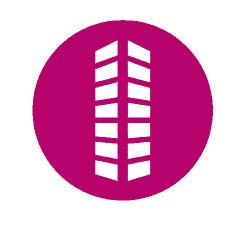
FURNISH LUMINARIES AS SHOWN ON THE DRAWINGS IN THE LUMINAIRE (LIGHTING) SCHEDULE. THIS SHALL INCLUDE ALL LAMPS, MATERIAL AND LABOR TO SECURELY HANG FIXTURES, CLEAN THEM AND MAKE THEM COMPLETE AND READY FOR USE. ALL FIXTURES SHALL INCLUDE ALL NECESSARY ACCESSORIES REQUIRED.

VERIFY PROPER VOLTAGE FOR EACH LUMINAIRE AND PROVIDE BALLASTS TO MATCH ACTUAL APPLIED VOLTAGE AS SHOWN ON

VERIFY EXACT TYPE CEILING AND RECESSING DEPTH OF RECESSED LUMINARIES AND FURNISH SPECIFIC MOUNTING TRIMS AND

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Issue/Description

ELECTRICAL SPECIFICATIONS

Project Information

Energy Code: 2021 IECC 7-Brew Albuquerque, NM (Carlisle) Project Title: Project Type: **New Construction**

Construction Site: Owner/Agent: Designer/Contractor: Ken Brock Galloway & Company 400 S Emporia Albuquerque, New Mexico 7 Brew New Mexico, LLC Wichita, Kansas 67202 Additional Efficiency Package(s) 3163685443 kurtismcmurray@gallowayus.com

Credits: 10.0 Required 0.0 Proposed

Allowed Interior Lighting Power

Area Category	Floor Area (ft2)	Allowed Watts / ft2	Allowed Watts
1-Coffee House (Common Space Types:Dining Area - Cafeteria/Fast Food)	510	0.40	204
2-Storage/Cooler (Warehouse Storage:Smaller, Hand-Carried Items)	206	0.69	142
		Total Allowed Watts =	346

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Coffee House (Common Space Types:Dining Area - Cafeteria/Fast Food) LED: A2: 2X2 LED TROFFER: Other:	1	8	30	240
2-Storage/Cooler (Warehouse Storage:Smaller, Hand-Carried Items) LED: A1: 2X4 LED TROFFER: Other: LED: F: 4' LED STRIP LIGHT: Other:	1	1 1	30 48	30 48
	Tot	tal Propose	ed Watts =	318

Interior Lighting PASSES: Design 8% better than code **Interior Lighting Compliance**

Statement

Data filename:

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature

Project Title: 7-Brew Albuquerque, NM (Carlisle) Report date: 11/04/25

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▶ COM*check* Software Version COMcheckWeb

Energy Code: 2021 IECC

Requirements: 72.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

efficiency package options.

# & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3. 1 [EL22] ¹	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.1, C405.2.1. 1 [EL18] ¹	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, corridors, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.1. 2 [EL19] ¹	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more within 20 minutes of when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor. Lights not turned off by occupant sensors is done so by timeswitch.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.1. 3 [EL20] ¹	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) general lighting in each zone permitted to turn on upon occupancy in control zone, 3) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 4) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.2, C405.2.2. 1 [EL21] ²	Each area not served by occupancy sensors (per C405.2.1.1) have timeswitch controls and functions detailed in sections C405.2.2.1.	□Complies □Does Not □Not Observable □Not Applicable	

High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Project Title:	7-Brew Albuquerque, NM (Carlisle)	Report date: 11/04/25
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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
1,	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.5 [EL27] ¹	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.7 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C405.8 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.9.1, C405.9.2 [EL28] ²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.10 [EL29] ²	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Exception: Requirement does not apply.
C405.1.1 [EL30] ²	At least 90% of dwelling unit permanently installed lighting shall have lamp efficacy >= 65 lm/W or luminaires with efficacy >= 45 lm/W or comply with C405.2.4 or C405.3.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.
C405.11, C405.11.1 [EL31] ²	50% of 15/20 amp receptacles installed in enclosed offices, conference rooms, copy rooms, break rooms, classrooms and workstations and > 25% of branch circuit feeders for modular furniture will have automatic receptacle control in accordance with C405.11.1.	□Complies □Does Not □Not Observable □Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

Data filename:

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C303.3, C408.2.5. 2 [FI17] ³	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.1.1 [FI57] ¹	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C408.2.5 [FI16] ³	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.3 [FI33] ¹	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
Addition	al Comments/Assumptions:		

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Date Issue/Description

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Project No:	61P000006.30
Drawn By:	DMB
Checked By:	JTH

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Report date: 11/04/25

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Comments/Assumptions

Project Title: 7-Brew Albuquerque, NM (Carlisle)

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